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WATU NA JUHUDI YAO NDIO SHINA LA MAENDELEO

(People and their hard Work are the Foundation of Development)

KUPANGA NI KUCHAGUA. CHAGUA KUTANGULIA

(To plan is to choose. Choose to go forward)

From the Speech by the President to the T.A.N.U. Conference on 28/5/1969.

Second Five-Year Plan

for

Economic and Social Development

1st July, 1969 - 30th June, 1974

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SPEECH BY THE PRESIDENT, MWALIMU JULIUS K. NYERERE, TO THE T.A.N.U. CONFERENCE—28TH MAY, 1969

President Obote, President Kaunda, President Mobutu, Distinguished Guests, Fellow Members of TANU.

First, let me express our pleasure in having our distinguished visitors from Zambia, Uganda, Congo (Kinshasa), Kenya, Guinea, and Zanzibar, with us at this Conference. It is not necessary for me to introduce them, nor even to say anything about our warm feelings of friendship for them and their countrymen.

These representatives of our neighbouring states are not strangers or guests. They are our brothers; they have come to visit the home of a brother. All that is necessary for me to say to them, is that we are very happy indeed that they were able to join us at this important Conference. To the wolrd, however, I have one thing to add. The brotherhood of the peoples of the different countries in this area is not just a matter of attending each other's Party meetings or having periodic Heads of State Conferences. Our brotherhood is a deep ocean of shared knowledge, mutual responsibilities, and inter-locking affections. Those who wish to use us against each other, or to divide us from each other, should know that they are undertaking the task of drying up that oceans and blocking the rivers which feed it. Nothing short of that achievement will help them. It is true that sometimes the enemies of Africa are able to create storms of misunderstanding on the surface of our unity through clever intrigues or false reports—although the effect of their efforts is reduced by frequent joint consultations and discussions of common problems. But the brotherhood of the peoples of this part of Africa is not a question of leaders, or of politics, or even of economics: our brotherhood is that of peoples consciousness of a common history of oppression, exploitation and humiliation and a common determination to build a new future. It cannot be destroyed by the lies of our oppressors.

Having repeated those truths, my job this evening is to introduce to this Conference the Second Five-Year Development Plan for Tanzania. Consideration of this Plan is a major task of the delegates on this occasion—and I shall confine my attention to it.

Last week, Mr. Bomani, Minister for Economic Affairs and Development Planning, explained to the National Executive at some length and very carefully the Second Development Plan. I have asked that the delegates should be given this speech. Further, during this week and the week following you will have an opportunity to listen to each Minister explaining the Plan as it relates to his own Ministry. Therefore it is not my purpose either to go over the things which Mr. Bomani said and which you can read for yourselves, or to explain the Plan for each Ministry for this will be done by the Minister concerned. My purpose this evening is to emphasize certain matters which I believe need emphasizing—and particularly those which are not so pleasing.

Of course, such a large body as this cannot usefully discuss the details of the two-volume plan which has been prepared by Government. What it can do, and should do, is to discuss the general strategy laid down in the Plan. For the task of TANU is to determine general policy; Parliament has to look at Government's proposals in more detail and within the framework of the policy laid down by the Party. I shall therefore try to make three things clear in my speech this evening: to explain in broad outline the problems we encountered during the First Five-Year Plan period; the lessons we have learned; and the decision which the Government has made about the priorities for the next five years.

These priorities have been decided upon in the light of our objectives, which are: firstly, providing an adequate and balanced diet for all our people—which means healthy bodies; secondly, providing sufficient good, and if possible attractive, clothing for all our people; thirdly, providing decent housing for all our people; and fourthly, providing educational opportunities for all the people.

There is, of course, a very important sense in which our Party has already made the basic decisions underlying the Second Five-Year Plan. By the resolutions of the Arusha Declaration we have decided that our Government and our people must work for economic growth in a manner *which will bring benefit to all;* and we have decided on the policy of *Socialism and Self-Reliance*. It is in the light of these accepted objectives that the Government has examined the achievements and failures during the First Plan period, and used the accumulated experience in drawing up the Second Plan.

Problems and Lessons of the First Plan.

It is, of course not yet possible to give a full assessment of how far we achieved First Plan targets, because information about our achievements during 1968/69 will not become available until next year. The best we can do for this final year is to estimate. Even then, it will not be very much use trying to compare what we actually achieved with the target figures set out in the First Plan document; we made adjustments and amendments to the Plan as experience showed that we were making mistakes or as the circumstances changed. Thus, for example, the failure of Cosata to give good service to our people meant that it was wound up and its international trade functions taken over by Intrata—itself absorbed into the State Trading Corporation at a later date. The drastic fall in the price of sisal also required a radical change in the output plans for this crop, at the same time as it affected the whole financing expectations of the Plan. In addition, the Rhodesian minority declaration of independence in 1965 required an emphasis on communications with Zambia which had not been planned for.

Real changes in outside circumstances were not the only problem. Another problem was the lack of adequate statistical information about our country. Thus, whereas we worked on the assumption that our population was growing at a rate of 2·2 per cent. per annum the census revealed that there were many more Tanzanians than we had imagined, and that the number was increasing at a rate of 2·7 per cent. per annum.

Making assumptions about things outside domestic control, and working on the basis of inadequate statistics, are both inevitable for any under-developed country which is preparing an economic development plan. Tanzania is taking steps to improve the quantity and quality of the information at our command; the full analysis of the population census, the agricultural census which will be taken shortly, and the continuous attempts to collect better industrial and commercial information, are all part of this work. But for the time being, both of these problems remain, and have to be taken into account. Whereas the First Plan had detailed lists of projects for the whole five-year period—many of which had to be abandoned—in the Five-Year Plan we have committed ourselves only to the projects which we expect to carry through during the first two years. This means that the Second Plan is more flexible than the First; while the general targets are set out and the priorities established for the whole period, we shall be able to make adjustments where necessary with much less difficulty than previously, and without upsetting the balance of the Plan.

Further, the projects which are listed for the first two years of this Plan are all in an advanced stage of preparation; we shall thus avoid the extremely slow start we made in 1964 and 1965, when progress was held up because neither the projects, nor the implementation procedures, had been worked out in advance.

The Arusha Declaration.

There is another factor which makes it extremely difficulty to assess our achievements over the past five years by comparing what we have actually done with the figures presented in the First Plan document. In 1964 we had not worked out at all clearly the implication of our socialist belief. As a result, we were simply trying to attract investment of any type, and the role of public enterprise appeared to be that of filling in gaps left by private investment. Indeed it is worth remembering that the National Development Corporation was not created until 1965, and its function as a promoter of socialist large-scale production was spelt out even later.

All this changed in 1967 when the Arusha Declaration was adopted; the N.D.C. was then given its very heavy new responsibilities, and other parastatal organizations were created. A similar change affected agriculture. In the First Plan we talked only in terms of increased production and our efforts were directed at encouraging greater output, even when this meant helping individual peasants to become employers of labour. The policy of Ujamaa Vijijini which was adopted by the Party in October, 1967, meant the beginning of a change; gradually we are moving towards a programme of integrated rural development which leads in the direction of the kind of socialist society we are trying to create. This changed policy is fully reflected in the new Plan, which has socialist rural development at its very core.

For all these reasons the Second Plan document is very different from the First. It is much more a statement of strategy and its projections into the future are not always as precise. This does not mean that we have made no forecasts; planning is impossible without them. But the general targets and forecasts are given as a basis for a continual process of progress assessment; they will enable necessary adjustments throughout the economy to meet particular changes. For example, the estimates of pupils passing through each phase of higher education will enable us to judge how far we shall be meeting employment needs at a later stage; if less people than anticipated qualify to enter the science faculties of the University, then we shall know that three years later we shall either have to employ more non-Tanzanians than expected or reduce our demands for people with science degrees; and so on. The same is true as regards finance. Careful estimates of the money we expected to be able to raise from different sources and of the costs and priorities of different investment projects, mean that we can hope to ensure a balanced progress in different sectors of the economy, and can see quickly if we are running into difficulties. In fact one important aspect of the Second Plan is its emphasis on checking the progress we are making, and checking the efficiency of past investments.

Planning Means Choosing.

But although this Second Plan is an improvement on the First planning is always the same in one important respect. It involves making decisions about the allocation of scarce resources; it means choosing between many desirable activities, because not everything can be done at once. It is vital that this should be clearly understood. There are many things which are urgently needed in Tanzania and which the Plan does not provide for. Every delegate to this Conference will be able to provide a list of things in his district, or in his village, which will not be done in the next five years even if every project mentioned in the Plan is carried through. We have to accept that. To a greater or lesser extent every country in the world has a limit to its resources and the more it spends on one thing, the less it can spend on another. This is true even in a rich country like the United States of America, where it is frequently stated that the plans for tackling the internal problem of poverty were destroyed by the costs of the Vietnam war to which it gave priority.

This problem of choice is very much greater for Tanzania. The publication of a Five-Year Plan does not create more resources; all it does is enable the nation to allocate the resources it possesses in a manner which will bring the people as quickly as possible towards the goals they have set themselves. The less your resources, the greater the number of difficult choices which have to be made. For just as a poor worker has to decide whether to spend less on food in order to buy himself a new shirt, so a poor nation has to decide whether to provide schools or hospitals; new houses or new water supplies; to make an attack on the ignorance which causes people to suffer from preventable diseases, or to build roads which will enable peasants to market the goods they produce. Indeed, before it can make any of these choices between alternative investments, a poor nation has to decide what proportion of its wealth it is willing to devote to any kind of investment; because every shilling spent on investment means that one shillings less is available for current consumption. That is our position now, just as it was in 1964. In this respect the two Plans do not differ. We have to make choices between good things, not between good things and bad things; to plan means to choose.

The Financial Achievement.

The fact that difficult choices remain does not mean that we have made no progress during the first five years, or that the First Plan was a bad one. On the contrary, we have laid a firm foundation for future growth. It is not my intention this morning to list our numerous successes; the Ministers will do that as they address the Conference. Nor is a post-mortem called for! It is true that, after making allowances for changed prices, our real investment achievement was only about 75 per cent of the target set out in the Plan, and that we achieved an economic growth rate of nearer 5 per cent than 6·7 per cent. If we take into consideration the problems with which we started, and that this was our First Plan, our achievement is not a small one; for our progress compares reasonably well with that made by most other developing countries. A large part of our shortfall arose because we were not adequately prepared to begin work immediately the Plan period opened, and because we were relying too heavily on external or private investment.

As time went on we realized these faults and we took corrective action which, in relation to the financing of the Plan, was a great success. We forecast that about 22 per cent of the Central Government expenditure and about 48 per cent of the total investment expenditure would come from local sources; for the rest, we were relying on external assistance. In fact, however, out of a total expenditure only slightly smaller in money terms than that planned, more than 65 per cent of the Central Government capital expenditure was financed from domestic sources, and something like 70 per cent of the total investment spending came from within Tanzania. The Minister for Finance will give more details of this magnificent achievement—with some warnings about the future! I will only say that these figures show both the sacrifices our people are making for the development of their country, and an example of first-class financial management on the part of our Minister and his officials. The Ministry of Finance is always unpopular with other Ministries of Government, and I would be the last to suggest that improvements in administration are not both necessary and possible. But when results like this have been achieved, I think those responsible for imposing the necessary financial discipline deserve our thanks. The Ministry of Finance, and the people themselves, deserve congratulations for our great success in self-reliance.

Education.

Just as the meaning of our success in the field of finance was that we were to go ahead with planned and essential development work, so the cost was that all of us had somewhat less in our pocket for private expenditure than we would have liked. In the other area where we fulfilled Plan targets—that of education—the cost of our success was met by our younger children. Let me explain.

At the beginning of the last Plan we took a very definite decision to give priority to the expansion of secondary education, teacher training and the University. Because to plan is to choose, that meant that we had very little money available to devote to expanding the primary school system. And we carried out that decision. More than 7,100 children will enter Form I of the secondary school this year as against 5,250 in 1964. The number of young people entering Form V is more than twice as great this year as it was at the beginning of the First Plan. And the number of young men and women who are beginning a Grade A teacher training course in 1969 will be nearly four times as great as the number who did so in 1964—that is, 1,200 this year as against 320 in 1964. These achievements will contribute greatly to our aim of becoming self-sufficient in high-level manpower by 1980; in overall terms, and with an exception I shall refer to later, we have achieved what we set out to achieve.

The effect of this has been, however, that expansion in the number of primary school places has been held back. We have done very little more than expand at the same rate as the number of Tanzanian children was increasing because of the population growth. Indeed, the census has revealed that the chances of a 7-year old Tanzanian going to school are worse now than we thought they were when we drew up the First Plan. At that time we used to say that about 50 per cent of our children went to school. The much larger population of the country which was revealed in the census figures showed us that the actual percentage in 1964 was nearer 46 per cent, and even now, at the and of the Plan period, only about 47 per cent of our children can find a primary school place.

This state of affairs must be unacceptable to a country which claims to be building socialism. Obviously the emphasis in the new Plan must be shifted to primary education. But the amount of money which we can devote to education is still limited, and the census could not reveal an increase in the number of trained teachers because we already knew exactly how many teachers had been trained! The Government has therefore been forced to think of priorities even within the primary school sector. For the truth is that many of our children who do go to primary school have to leave after Standard IV. Over much of the country, therefore, we are still wasting money and effort by giving children four years' education, and then abandoning them at an age when they are very likely to forget even that little which they have learned. Government has therefore been forced to choose between an all-out attack on the numbers of children entering primary Standard I on the one hand, or removing this iniquitous and absurd Standard IV examination on the other. For to plan is to choose. Our resources do not allow us to do both at the same time. The decision which Government has taken is that we should concentrate our efforts on getting rid of the necessity for selection at Standard IV. This means that, instead of greatly expanding the number of Standard I classes, we have rapidly to increase the number of clases at Standards V, VI and VII, in order that every child who enters primary school should get a full seven years' education.

We have made this decision because we believe it is better that money should be spent on providing one child with a 7-year education which may help him or her to become a useful member of society, rather than divide that same amount of money and staff between two children, neither of whom is likely to get any permanent benefit. For the justification of spending money on education in our present economic situation is that this is an investment in our future.. Giving a large number of children only four years' education, means merely that we have foregone the present satisfaction of other needs without gaining anything in the future. It is rather as if we spent our money on putting up the walls of two factories knowing that we had insufficient money to put a machine in either, instead of building one factory properly so that it could begin to produce the goods we need.

The effect of giving priority to eliminating the Standard IV examination is that by the end of the Second Plan we will still only have places for about 52 per cent of our eligible children in Standard I. But no child who enters primary school this year—1969—or afterwards will have to take that examination; they will go straight through to Standard VII. It will, however, now be 1989 before we are able to introduce universal primary education in Tanzania.

Before I leave this question of primary school education for our children, I want to discuss one other thing which is related to it. I have already pointed out that when we took the census we discovered that our population was increasing at a faster rate than we had assumed when we prepared the First Plan. We had worked on the assumption that the total population of Tanzania was about 10 million, but the census showed that in fact it was 12¼ million. We had also thought that the annual rate of increase was 22 for every thousand people; we discovered that the annual rate of increase was 27 for every thousand people. And that means that in the coming five years our population will increase by 35,000 people every year.

The thing I want to say is this. It is very good to increase our population, because our country is large and there is plenty of unused land. But it is necessary to remember that these 350,000 extra people every year will be babies in arms, not workers. They will have to be fed, clothed, given medical attention, schooling, and many other services for very many years before they will be able to contribute to the economy of the country through their work. This is right and proper and is in accordance with the teachings of the Arusha Declaration. But it is obvious that just as the number of our children is increasing, so the burden on the adults—the workers—is also increasing. Giving birth is something in which mankind and animals are equal, but rearing the young, and specially educating them for many years, is something which is a unique gift and responsibility of men. It is for this reason that it is important for human beings to put emphasis on caring for children and the ability to look after them properly, rather than thinking only about the numbers of children and the ability to give birth. For it often happens that men's ability to give birth is greater than their ability to bring up the children in a proper manner.

There is one other aspect of our educational work over the past five years which I must mention. We have recognized that, in order to meet the requirements of high-level manpower by 1980, we have to achieve a drastic increase in the number of university science graduates. But we are not achieving that necessary increase. The failures in science at both higher school certificate and at university degree level are such that, unless some improvement can be made quickly, we shall miss our

1980 target in this important field by as much as 30 per cent. It is no use lowering our standard; that would be merely hiding the problem under pieces of paper. Building roads, bridges, electric appliances, or running factories, agricultural research, and so on, are matters of knowledge not of certificates.

Quite clearly some investigation and corrective action has to be taken on this matter; and this must begin as a matter of urgency. Are our students failing because of the teaching, of the facilities available, of the curriculum at lower levels which leave our pupils unfamiliar with scientific concepts, or is there some other reason for this experience? These things we must know, for Tanzania is involved in a world based on technology, and we shall remain backward and dependent upon others until we are able to produce our own people with scientific skills.

Industrialization.

Let me now turn to the implications for the Second Five-Year Plan of our recent successes and failures in the field of processing and manufactured goods. This was a sector where our slow start at the beginning of the First Plan has resulted in a somewhat disappointing result at this point in time, although the investments which we have now made will enable us rapidly to increase our output even if there is no further investment, so that the figures would look better twelve months hence than they do this year.

It is true that we doubled the value of the capital goods—that is, the machines in factories, the buildings, the industrial equipment, and so on—being used for productive purposes. But this meant that we were expanding our industrial production at a rate of only 10% per annum instead of the 14.8% per cent annum which was our target. Industry therefore now accounts for about 7% of our gross domestic product, which is slightly less than we had hoped for.

Nonetheless, the number of Tanzanian manufactures now on sale in our shops demonstrates that we did make considerable progress in the production of goods which we used to import. We shall continue to expand simple manufacturing, the processing of primary commodities, and the provision of basic construction materials; but we have now reached the stage where we must think seriously about the next and more difficult phase of industrialization. For it is comparatively easy to produce your own textiles, cement, and similar goods; beginning to produce your own capital goods, and goods which are used only in the production of other things, is a more complex operation and demands a more sophisticated degree of economic planning. Yet such a move is essential for long-term growth; an important task which will be undertaken early in the Second Plan period is the preparation of a long-term industrialization Plan, taking into account the possibilities of the East African Common Market and of exports. The aim is that we should be ready to embark on this kind of work at the very beginning of the Third Plan.

Let me just add one further point. Although mass production is the best and cheapest way of meeting the needs of our people for certain types of goods, there are many others where the needs can be best met by labour intensive, small-scale industries and craft workshops. Obvious examples of this are furniture, which can be made locally from local materials without the problem of transportation over long distances; ready-made clothes; and local food preservation. It is vital that we should increase our efforts in this matter, for such activities have the further advantage that they require very little capital investment, and they can be carried on the villages and small towns of our country, thus improving the quality and variety of life in the rural areas.

The details of this and other parts of the Plan will be presented to you by the Minister. I would, however, like to draw your attention to the fact that most invesment in industry will take place in the parastatal sector, in accordance with the Arusha Declaraion. Only about 16% of the total industrial investment will be undertaken by the private sector, and it is expected that a large element of this will be these small-scale projects where only a small number of people are employed. It is also expected that the workers and co-operative organizations will play a part in expanding the industrial sector of our economy; we are relying upon them for something like 7% of the total increase in industrial potential.

Agriculture.

Industrialization, however, was not the central element in the First Plan any more than it is in the Second. We did then, as we do now, recognize that the basis for our development in the near future must be agriculture. Unfortunately we made two decisions in 1964 which events have proved wrong. The first of these was in relation to sisal.

In 1964 we produced almost 230,000 tons of sisal and the average price actually received by the producer—taking all grades together—was in the region of Shs. 1,7000/- per ton. The target we set ourselves for 1970 was a production of 270,000 tons and we anticipated that our export price would have dropped a little. In the event, the export price dropped catastrophically as early as 1965, and low prices continued until in 1968 the average price received by the producer was only Shs. 765/- per ton. Consequently, our target for this crop had to be radically revised, because many estates became uneconomic to run; the amount actually produced last year was therefore less than 194,000 tons. This caused a very great change in many sectors of the Plan. The amount of employment in the sisal industry dropped from 96,400 in 1964 to 41,668 in 1968; and the foreign exchange earned by the industry—which was badly needed for capital imports—dropped from Shs. 434 million in 1964 to less than Shs. 187 million in 1968. The question as regrads sisal now is not the rate at which we can expand the industry, but how slowly, and to what extent, we should contract it and shift our resources on to the production of other more profitable crops or of livestock.

The other aspect of the First Plan which proved to be mistaken was our emphasis on what we called transformation approach—the opening of Government-financed new settlement schemes of a highly mechanized nature. There is no need for me to discuss this now; I did so when we recognized that this policy was too expensive in money and mistaken in its estimates of economic and psychological results. All the settlement schemes which were started and which still survive will now be gradually converted into Ujamaa villages.

The production of many other crops has been in accordance with the Plan targets, although in general the prices we receive are slightly lower than those prevailing in 1964. But the crucial thing for us to realize is that the increases in output were almost every where realized without any change in the method of production.

Our farmers have expanded the acreage they cultivate; they have worked harder. But almost everywhere they are still using the hoe, jembe and shoka. They have not yet changed the tools they work with. The expansion possible with these tools is very limited; we have probably reached the maximum in many areas. Yet we have done much too little to encourage our farmers to change over to ox-ploughs and other ox-drawn implements for weeding, sowing, and spreading fertilizer. In the whole country we still have only 4 ox-training centres, with another 5 due to be opened soon; our farmers still have to by ox-plaughs from abroad unless local carpenters have the knowledge and initiative to get a model from the Machinery Testing Unit at Arusha, which they could copy. Further, our women still carry the crops to market on their heads; ox-carts or donkey-carts are still so rare as to attract attention despite the large number of animals which are eating our fodder.

This situation must be changed—and the Plan includes provision for a big expansion of oxen plough training. The Ministry must act rapidly to make improved tools available, and the farmers must press forward into using new methods—which will often involve working co-operatively and not continuing as individual peasant farmers. There is no alternative if we are to improve our standard of living. For a higher standard of living does not mean just having money to spend on clothes, roads, and so on, although of course it includes these things. It also means not having to act as a beast of burden, not having to walk miles for clean water, having plenty of good and nutritious food. All these things we could do easily. To use people instead of an ox or a donkey, when we have both oxen and donkeys, is not sensible. We are holding back our own development. Firstly, we cultivate shambas which are too small; secondly, we reduce the time available for other development work and for educating ourselves. I hope that during the period of the coming Plan, both TANU and Government leaders will exert every effort to persuade the people in our rural areas to change their methods of work, and will help them to obtain the new tools.

Food.

Although we emphasize cash crops in our agricultural policy, today I want to discuss the question of our food—for, as we said earlier, our first aim is to provide sufficient and better food for everyone. Anyone travelling in this country sees poor and undernourished children, some of them sitting listlessly—lacking even the energy to play—and others easily exhausted. Also, those who have seen the Chinese working on the railway survey, or the Americans building the road to Zambia, will have noticed how our people get tired very quickly in comparison with the Chinese and Americans. The reason is not that our people are lazy. It is that they do not get enough meat, eggs, fish, and milk, or other protein foods even to feed their bodies properly. But although this is well—known, if you suggest to our citizens that they should keep chickens they will ask: "Where shall we sell them?" Or: "Where shall we sell the eggs?" These are very stupid questions. Those who buy chikens or eggs do so to have food. Similarly, those who keep chickens should do so for the purpose of providing their food and that of their chidren.

Why is there a single family in our rural areas which does not keep decent chickens? They could be fed on the scraps from the farm; it is only if you are trying to sell eggs to the tourist hotels that you need to spend money on expensive special foodstuffs. Or who is there in our rural areas who would be unable to keep ducks or rabbits in order to improve the feeding of his family—if he wanted to do so? Yet we do not do it; meat remains a luxury to many of our people!

And it is not only meat: the production of groundnuts has gone down because the price is unattractive. But is every farmer in the possible areas growing some groundnuts for the feeding of his family? Nuts, beans, and vegetables, are good nutritious food which build up the body and mind; and at least one green vegetable, one type of nut, and one type of bean can be grown in almost every part of Tanzania.

And what of fruit? We act as if fruit is only good for Europeans or for children, and even for our children we rely upon the accidental growth of a self-seeded tree somewhere in the vicinity. Surely the time has come when the

Ministry of Agriculture, Food and Co-operatives should be preparing nurseries of fruit trees in each District, so that our farmers could plant a selection of different fruit trees around their own homesteads. Pawpaw, mangoes, oranges, limes, etc., provide essential vitamins which are important for the health of every human being and should be a regular part of our diet. As I have said before, a handful of nuts and a slice of pawpaw every day could protect many of our children from vitamin deficiency blindness, as well as give their bodies a defence against many other diseases. Yet at present in our rural areas we waste the fruit which is available. We do not try to preserve it for use in the out-of-season period—we neither dry it, make chutney, jams or anything else. And in Dar es Salaam we sometimes see children knocking down unripe mangoes and cashew apples from the trees. Surely we can line our streets with fruit trees, so that eventually the citizens and children of this city can always get what they want, and we can have shade from the hot sun. Further, if the Ministry of Agriculture, Food and Co-operatives prepares nurseries in this Region, it should be possible for every family in the new housing estates of Dar es Salaam to grow one or two different trees in its garden. This would provide fruit at different times of the year and at the same time beautify our city.

Our present attitude to food is the result of ignorance, indifference and indolence. Many of our people do not realize what they can do, or why it is important that they should; and they find it easier to carry on in the old fashion than to make the effort to change the condition of their life—partly, of course, because they are themselves suffering from the effects of long-term bad feeding. It is essential that Government and Party officials at all levels should intervene Units, Community Development workers, and the Agricultural Field Officers, all working as a team to show why and how improvements in diet can be made. But it is also necessary for Central Government and parastatal organizations to bear our health problems in mind. The mills which process sugar, flour, and rice, must consider the health of our people more than the appearance of the product; they must not think just of filling our stomachs without worrying about the nutritive value of the food.

I have talked at length about this question of food because the foundation of development is people. A hungry person cannot bring progress. He is weak of body and also weak of mind. This must always be remembered, especially in relation to chidren. When a child is not well fed he will not grow properly—he will be deformed, and his intelligence will be affected also; he will not reach to his full potential. The question of sufficiennt food, and good food, is absolutely vital to the development of our people, in both towns and villages.

The priority give to rural development has very wide implications. Certainly increased production of both cash crops and food crops is essential. In particular, we must expand our production of cotton, cashews, tobacco, and wheat; we must use our cattle, sheep and goats more productively. Plans for all these things are laid out in the documents, and the targets must be broken down into Regional, District, and even village, targets so that our people understand the challenge which is before them and can rise to the opportunities it presents.

This matter of understanding our plan is very important. For we make a big mistake if we try to force people to produce certain amounts or even to cultivate certain acreages of cash crops. Political officers who have tried this in the past find that the people cultivate the required area for the first year but that the crop is surprisingly small, and then when the second year comes along the peasants have moved further into the bush to get away from the officers of Government! This is contrary to all our long-term interests. Persuasion may appear slower than force, but it is more effective.

Ujamaa Vijijini.

Increases in output in the amount of wealth produced is, however, only one aspect of the socialist rural development we are aiming at. It is not necessary for me to repeat at length what I have said many times about the need for the development of ujamaa village and co-operative production units. Our policy is firm; and we have now organized Government and Party so as to enable maximum help and encouragement to be given to all these socialist communities. The only point I wish to stress is the decision to start ujamaa villages, big and small, throughout the country.

We have rejected the idea that we should concentrate all Government assistance on the development of ujamaa villages in certain Regions or Districts, and have decided that we must make a wide-spread frontal attack on this problem. All Departments of Government will be involved in this task. Training of agricultural officers, of co-operative officers, of Party workers and of rural health workers, etc., will all include discussion of how they can assist the implementation of the policy of Ujamaa Vijijini. Ujamaa villages and groups of villages will be given priority in the services of these trained people, as well as in the location of new schools, dispensaries, local water supplies, and so on. Groups of people working together in socialist or co-operative units must also get priority in the allocation of Regional Development Funds. In other words, all Government activities in the rural areas will be directed towards helping the sound, economic development of socialist rural production and socialist living.

It is perhaps necessary to add a word of warning. Our resources do not suddenly increase because of this policy. We can give priority to ujamaa villages but we cannot help them if the resources are not available. The basis of ujamaa village organization is, and must be, self-help and self-reliance. It would be absurd and very wrong for TANU or Government officers to persuade people to start or to join an ujamaa village through promises of outside help. People must join together in this way because they understand that their own efforts will be more productive, and their lives made more secure and more enjoyable, because of their mutual responsibility for each other. But life in ujamaa villages must include modern development. The Government must help the members to make progress as quickly as possible away from the hoe, the sickle, and the need to carry everything on their heads.

The Wider Implications of Priority to the Rural Areas.

The decision to give top priority to rural development does not only affect what is done in the rural areas; it also has implications for every other aspect of the Development Plan. Thus, for example, it means that there is less money and less manpower which can be devoted to improving conditions in the urban areas. In this Second Plan period it is therefore necessary to put a limit of Shs. 250 million on urban infrastructure expenditure—that is, on the provision of roads, sewerage, lighting, etc. This still means that for every person who now lives in an urban area, there will be just under Shs. 60/- spent every year on building roads and everything else. It sounds a lot, but you cannot lay many inches of a tarmac road for Shs. 60/-! This urban expenditure will be concentrated on the areas where the less highly paid workers live, but even so, it is quite obvious that very little new development will be possible unless there is a great increase in the amount of self-help work done in towns.

This need for self-reliance and frugality is reflected also in the new Plans for houses to be built with Government or parastatal loan. Further attempts will be made to build decent houses at a still lower cost for renting purposes.

Where house purchase is involved, thre will be a new development of "site and service facilities" which will mean that only the very basic work will be done by the National Housing Corporation, and the rest will be left for the owner to do as and when he can add to his house in accordance with approved Plans.

But despite our shortage of money, we have decided to make a special effort in order to expand certain of our towns. We have made this decision for two reasons. Firstly, people are attracted away from the villages in search of work and other services which are available in the towns, and at present the great attraction is Dar es Salaam itself. As a result there are now in this city many people who came to look for work, but who cannot find any, and many others who have no houses to live in. It would be better to spread to other parts of the country the attraction which is now concentrated in one place.

Secondly, there is the fact that progress begets more progress, and developing town helps the development of nearby rural areas. For it must be recognized that the more factories which exist in any one place, the cheaper and easier it is to build a new factory there. For example, in a town where there are 5,000 workers employed, there is a ready market of about 25,000 people, all of whom need to buy food, clothes, and other consumer goods. Their presence justifies expenditure on building, let us say, a modern bakery, a small plant for making cooking post, and so on—each of which will employ more people. And the fact that roads, water supplies, power supplies, etc., have already been provided for some factories makes it convenient to site new factories in the same place. This is to say nothing of the fact that a large urban centre provides opportunities for local farmers to sell vegetables, fruit and other foodstuffs without great transportation costs. It is therefore Government's intention to try to build up 10 urban growth centres by diverting suitable new factories and employment opportunities to selected towns. The aim is to help each of these growth centres reach the point where it is in itself an attraction to industry without special Government intervention.

It is obvious that certain towns will be very disappointed to find that they have not been designated as an urban growth centre in this Second Five-Year Plan. I can only say that we have more than 10 towns and some disappointment is therefore inevitable—to Plan is to choose. If we tried to spread our efforts over more than 10 towns in this next period, we should find that we do not have urban growth centres at all; we should just have what we have now—a number of small towns none of which has not sufficient industry and public services to make it an attractive economic proposition for the sitting of new factories. By concentrating our attention on the towns selected, at least two or three should be able to stand on their own by the end of this Plan period. In the Third Five-Year Plan we shall then be able to add other towns to this classification.

Commerce and Trade.

The underlying meaning of all these Plans is that we are trying gradually to transform our economy so that it is no longer export dominated but is directed to the creation and service of a rising local market. Up to now the patterns of trade have been such that it is often easier to sell Mwanza goods in London that it is to sell them in Mtwara. Some progress has been made in correcting this situation over the past five years, but further effort is needed to improve our internal marketting and credit arrangements. This does not mean, and must not mean, a decrease in our exports; we need the foreign exchange they earn in order to pay for essential development goods. But we cannot continue to rely upon imported consumer goods and simple manufactures. In fact, in order to leave us with sufficient foreign exchange to buy the machines and other things we need for our new factories, it is necessary that the total value of consumer goods imported should be held constant over the next five years. As people earn more money from increased efforts, they will have to buy locally produced goods—and it is the responsibility of Government and parastatal organizations to ensure that the things required are available at the places where they are needed. Of course this does mean a restriction of consumer choice. For example, we are now producing instant coffee; it would be stupid for us to continue importing other brands of instant coffee just so that people can have a choice. Let them buy instant coffee produced in Tanzania or perhaps in East Africa. Similarly with cotton cloth: instead of being able to select from a choice of luxury cloth produced in all parts of the world, we have to learn to use the cloth we produce ourselves. It is either that and the success of our factories, or continuing to import and allowing our factories to go bankrupt. To Plan is to choose! We are nearly self-sufficient in the production of textiles and we cannot continue to indulge our stupid preference for imported cloth. What we cannot produce in Tanzania we should buy from East Africa—or, if the things are not essential, we should do without.

This restriction of choice is necessary and inevitable. But it must not be allowed to lead to inefficiency in production: our Tanzanian citizens must not be forced into buying poor stuff just because it is produced in Tanzania. Our local products need not be so handsomely wrapped, or so sophisticated in concept, as those produced in London, Bonn, Washington, or Peking, and the variety of patterns will naturally be reduced. But matches must light, flour must be free from weevils, cloth must be hardwearing and of fast colour, and so on. I know that not all our products are yet as good as they should be, but many are already of very good quality. I know, for example, that our cloth is very good, yet there are some stupid people who continue to prefer imported cloth.

In all these questions of quality in production, care in storage, and speed and efficiency of distribution, the parastatal organizations and the co-operative movement have a prime responsibility. The workers in these organizations must have initiative and drive; they must go out and seek new opportunities for service and they must be aware of developing demands. For these publicly-owned organizations not only constitute the largest element in the productive sector; over this Plan period and that following, they will become increasingly responsible for wholesale and retail trade. It is intended that the State Trading Corporation shall take on an increasing share of the wholesale trade, as well as most responsibility for imports and exports. Further, locally-based co-operative retail shops will get every encouragement from Government and after they have proved their ability to serve our people so co-operatives will gradually take over the larger part of retail trading.

Communications.

The only other specific sector of our economy to which I intend to refer today is that of communications. Once again we are faced with hard choices. Do we improve existing heavily used roads so that traffic is less liable to be held up by wash-aways or floods? Or do we build better roads in areas where traffic is not yet very dense, in the hope that good communications will encourage development where at present there is none?

The fact is that the cost of all the road works and the aerodrome construction which is now economically justified would be Shs. 1,182 million—or 47 per cent of the total Second Plan Government Investment Budget! Obviously we cannot make this kind of allocation to communications. We have to select the most urgent and most important schemes, leaving the others to be done later—for to plan is to choose. Government's decision is that first priority must be given to the bitumenization of the full-length of the Tanzania/Zambia highway, with all improvements necessary to ensure that this road remains open at all times. I do not think I need to justify that choice to this Conference. But we must accept its implications. Very little other major road works can be begun until the fourth year of the present Plan; and only a small amount of work relative to the need can be done on the feeder roads systems. Fortunately the construction of the Kilimanjaro International Airport makes a different kind of demand on our resources, and we expect to be able to go ahead with it. By doing so we shall put ourselves in a position to take full advantage of the tourist potential of Northern Tanzania.

The other communications project with which we expect to make headway is the Tanzania/Zambia railway. There are many enemies of this project; indeed, the world has never seen such profusion of railway projects in Southern Africa as those which are now being canvassed—and all of them are designed to try and stop this railway from being built. I do not believe that these efforts at sabotage will have any success at all. I am confident that the railway connecting the Zambia system with the East African rail system through Dar es Salaam will be constructed. We have therefore allocated Shs. 305 million over the Five-Year Plan period for the local costs for building the Tanzam railway.

Overall Targets.

In the First Plan we had a target rate of growth of 6·7 per cent per annum—in other words, we hoped to increase our wealth by more than 6 per cent every year. As I have already said, our achievement was a growth rate of about 5 per cent. At this rate, and because our population is increasing by 2·7 per cent every year, it would take us 30 years to double the average income per head in Tanzania. We must do better than that, even if we cannot achieve the 1980 target we set ourselves in 1964.

The Second Plan aims to achieve a growth rate of 6·5 per cent in real terms—that is, after allowing for price changes. This is now a realistic target because of the work we did during the First Plan period. But it will not be easy; to achieve it we have to increase still further the proportion of our wealth that we devote to investment. We have already done quite well. Whereas in 1964 only about 15 per cent of the wealth we produced was put aside for investment work, the comparable figure in 1967 was 22·9 per cent. That is a very big increase; we can be proud of it. But we must do still better. The target set in the Plan, therefore, is that by 1974 we should be devoting to investment 25 per cent of the wealth we produce in any one year. This is not quite as hard as it sounds; by then the total value of the wealth we are producing will be larger than it is now, for we shall be feeling the benefit of some of the investments we have already made.

Our Second Five-Year Plan sets out the amounts which we want to invest in agriculture, manufacturing, trade, construction, public utilities, transport, and so on. And it also sets out the increased production which we expect to get from these different sectors over the five-year period. These expectations may prove to be false either if we have successive years of bad weather, or if world conditions change very adversely. But they are reasonable assessments given normal conditions. In addition, the Plan shows the estimated number of people of different levels of skill who will be needed in the different sectors of the economy in later years, and shows the education, training and recruitment plans which are being made so that these requirements can be met. The Plan starts from an acceptance of our present wealth. Its forecasts of growth depend upon our willingness to invest an increasing proportion of the wealth we produce.

The total value of our planned investments in the next five years is Shs. 8,085 million. Of this, Government expenditure will be Shs. 3,055 million; the parastatals and co-operatives are expected to invest Shs. 2,300 million; and the East African Community is expected, in accordance with its own plans, to invest about Shs. 580 million in Tanzania. These are our targets. Of this amount, it is anticipated that about 60 per cent of Government expenditure will be financed from within Tanzania; between 60 per cent and 65 per cent of parastatal investment will also come from within the United Republic. In fact, during this Plan period something like 30 per cent of the investment needs of the parastatal organizations will have to be financed from Government sources, but as time goes on they will gradually be expected to become increasingly self-reliant—that is why they will be aiming at making profits now. Out of these profits they will make future investments.

Yet to talk as though development were simply a matter of investment is a big mistake. After all, if that were the case, a country which invested all its available resources on building a big palace of gold and marble could claim to be developing. What matters is not just the quantity of investment, but also its effectiveness in increasing wealth. A textile mill must produce good quality and attractive cloth; it is no use if it does not do so. And it is no use clearing a large farm and cultivating huge areas of groundnuts if no-one is going to by groundnuts. Research into the best way of spending the money available for investment, and checks on the efficiency of investments which have already been made, are very important indeed.

To poor people what is called "cost effectiveness" is absolutely vital. That means that we need to assess how big will be the reward for spending money on one investment as against another, for it is essential that we should get the best possible return from our efforts. For, I repeat; to plan is to choose. Also, once a factory or farm is established, we need to ensure that it is giving the best possible service. Some times this can be measured by profits; for example, if there are two factories which cost exactly the same to construct and both of which produce cotton cloth, then their comparative profits will give an indication of whether they are equally efficient in producing the things our people want. But in a socialist developing society, profits can never be the only measure of success. We have to take into account things like whether a factory uses a lot of scarce resources, such as highly skilled manpower, and whether it is sited in an area where there is a shortage of employment opportunities. Of course, our room for flexibility in this matter is not unlimited; we cannot afford permanently to subsidize new factories or industries. Yet is is still true that we cannot depend only on profits as a measurement of investment efficiency. We are not a company seeking profits we are a country seeking development. What a private company would not undertake because it would not make a profit may be necessary for our development.

This Five-Year Plan therefore provides for the working out of new checks on the practical impact of investments. This will involve research of many different kinds in industry, agriculture, commerce and administration; consequently I hope that we shall all abandon the idea that research is the same as spying, or that a researcher is really a person who is contributing nothing to our economy. Properly directed research can ensure that our money is properly spent, that our plans are really being carried out, and that we get the maximum benefit from the efforts we make and the policies we pursue.

At the same time we have to make extra efforts to improve the efficiency of our administrative services in Government, parastatal organizations, co-operatives and workers' organizations. At the moment many of our public services leave very much to be desired in this respect, and I think the position has got worse rather than better in recent years. It takes longer for letters to be dealt with, people are kept waiting in offices, an attitude of indifference is sometimes adopted towards our people who are seeking help or advice, equipment is not serviced properly, and so on. This is partly a matter of training and leadership, and further efforts will be made during the next five years to increase the training and educational facilities available for our public servants. But it is also a matter of work descipline.

It is sometimes said that Tanzanians are too kind to be willing to impose discipline on others and too casual to impose it upon themselves. Those who say this are not trying to praise us, but to criticise us. But it is our responsibility to make sure that we do not deserve these comments. For if we fail we shall have to give up any expectation of becoming self-reliant participants in the modern technological world. Those who want the benefits of modern life have to accept the discipline of modern life in factories, offices, hospitals, schools, workshops, etc. This means self-discipline for service in the first place, and then leadership in the second place. It means knowing what standards of work and behaviour are required, and then observing them.

Another matter of great importance for the success of this Plan is that there should be an improvement in planning and administration at Regional and local levels. The development of Tanzania cannot be effected from Dar es Salaam; local initiative, local co-ordination of plans, and local democratic control over decisions are also necessary. Some reallocation of financial and administrative responsibilities between the centre and the districts is included in this Second Five-Year Plan, and consideration is being given to the possibilities of further decentralization. But whatever the form of organization, it is essential that every Party and Government official, at both local and national level, should regard it as his duty to encourage socialist developments which spring out of the people's initiatives. We must not be hidebound by plan documents, but must recognize that if people are willing to make an extra effort and do not need to call upon national resources for success, then they must be encouraged.

For the truth is that the ppeople of this country are the real developers of Tanzania, as well as being the purpose of Tanzanian development. Even large-scale projects like mass production factories, tourist hotels, state farms and so on are undertaken only to further the well-being of Tanzanian Citizens: it is vital that we should always remember that. For sometimes these big projects, which are of benefit to the nation as a whole, require a big change in the lives of particular groups of people, and this group may well be more conscious of the direct problems they are experiencing than the very indirect benefits they will later receive. It is therefore not good enough for the responsible officials just to go to the location of the project and start digging the foundations. At the very least the people in the immediate vicinity should be told in advance what is being planned, why, and when work will start. Then they can begin to make their own plan accordingly, and in the process they should receive all possible help and co-operative from TANU and Government officials.

Running right through our development activities must be this kind of consideration for people. No-one who ignores the feelings of people can be a socialist, for socialism is about people. And it is not good enough just to think of the "masses" and how they will benefit from a particular project in the long run. The masses are the people considered together: if you do not care about a small group of people, it is at least open to doubt whether you really care about the large group. Of course, it is true that we have to proceed with nationally needed projects, even though they will cause inconvenience and difficulty for particular groups; we cannot stop building a railway because some people have their farms on the proposed route or object to the noise which the trains will make. But the question I am discussing is not whether the project goes ahead, but how this inconvenience and difficulty for a few people is handled. A socialist will care about them, as well as about the railway; a socialist leader will get their understanding and support for the railway, and will help them to take the opportunity of the move to organize their new lives on a basis which allows for socialist growth.

Friends; we have a lot to do. I hope that this week every delegate will work hard to understand the problems and opportunities before our people. We rely upon you to explain this Plan, and to co-operate with all your fellow citizens for its success. The people of Tanzania have shown what they can do despite great difficulties. Now that we have prepared our organization for further development, let us go foward to even greater efforts in the future.

To plan is to choose. Choose to go forward.

INTRODUCTION BY THE HON. PAUL BOMANI, M.P., MINISTER FOR ECONOMIC AFFAIRS AND DEVELOPMENT PLANNING

Since the First Five-Year Plan was published, there have been radical developments in our economic philosophy and considerable experience gained in tackling the practical problems to be overcome in achieving successful planned development. The Second Plan is a systematic attempt to implement the principles set out in the Arusha Declaration. It is also fashioned in light of the planning experience we have accumulated in the past five years.

One thing that we have learnt is that planning is not an activity to be done each five years, and then to be forgotten; it is a continuous process. The Five-Year document represents a report on work in progress. The objectives we have set ourselves are firm, but the means by which we will pursue them are flexible. Following the publication of the Plan there will be a continuing process of planning activity—in the production of Annual Implementation Plans, which will translate the Five-Year Plan into detailed annual action programmes, through the development of planning at the regional level, which can take account of local needs and opportunities, and in detailed project planning in the Government ministries and parastatals.

In working on this Plan we have found it necessary to make difficult choices; the resources available are scarce and our needs have been very great. We have tried to produce a good balance—a balance between directly productive investments which can increase our future resources and social investments which meet urgent immediate needs of our people; a balance between short-term results which can be enjoyed now, and making those long-term changes in our economy which are necessary for sustained growth; a balance between investing in those parts of the country which are already fast growing and which sometimes have the most obvious investment possibilities and those parts which have been neglected in the past and need an extra push. The objectives of the Plan are ambitious; if everyone plays his part we might exceed our targets and achieve even more, but in realistic terms we must recognize that the achievement of this Plan would be a major breakthrough in Tanzania's history.

We have also recognized that the Plan must not be rigid, that circumstances in a growing economy change very fast. We have, therefore, allowed for regular review and up-dating of the Plan, and in organizing the project side of the Plan we have concentrated our attention most seriously on the immediate problem of organizing projects to be implemented in the first two years of the Plan.

I see the Plan as a practical, balanced and ambitious programme in the implementation of the principles we have accepted to guide us in the Arusha Declaration, which will demand a great effort from our people, but also provide them with great benefits.

CHAPTER I

OBJECTIVES AND STRATEGY

The Second Five-Year Plan presents a detailed programme which aims to implement the principles set out in the Arusha Declaration. The philosophy of the Plan therefore incorporates five principles:

(i) *Social equality*—The Plan aims to spread the benefits of development widely throughout society;

(ii) *Ujamaa*—The Plan emphasises the development of forms of economic activity which encourage collective and co-operative efforts and avoid wide differences of wealth and income;

(iii) *Self reliance*—The Plan emphasises development through the maximum mobilization of domestic resources, particularly through mobilization of the people;

(iv) *Economic and Social Transformation*—The Plan emphasises rapid expansion of productive capacity to create the basis for future economic and social transformation;

(v) *African economic integration*—The Plan emphasises the extension of economic co-operation with other African states.

A. *The Economic Perspective.*

2. The First Five-Year Plan aimed to achieve a growth rate of 6·7 per cent per annum for the whole economy in the period 1960/62 to 1969.

The longer term perspective up to 1980 was based on the same growth rate. The performance of the First Plan so far has been quite successful, particularly for a first plan, but is seems likely that the aggregate growth target will not be achieved. In formulating the Second Plan the proper starting point is the lessons to be learnt from the First Plan.

3. Growth achieved in the period 1960/62–1967 is estimated at 4·3 per cent per annum (according to the official estimates of G.D.P.). Some of this growth was lost because of a decline in the ratio of export to import prices.

Existing data underestimate real growth which was probably in the range 4·8–5·2 per cent per annum over the period 1960/62–1967. However, it now seems evident that population growth is faster than was envisaged when the First Plan was formulated. Therefore per capita growth will be well below the target rate. Some of the factors which have prevented the realization of the planned growth rate were the sharp decline in the price of sisal at the outset of the Plan; external finance came forward at a lower rate than foreseen in the Plan; in the Central Government, shortage of skilled manpower delayed programme implementation in the first years of the Plan; and in the rural sector, the capital intensive settlement schemes were curtailed after the first two years of the Plan.

4. The economic tactics guiding the initial choice of the targets for the Second Plan rest on two principles:

(i) *Realism*—to retain credibility for the Plan as a serious discipline on the economy and a meaningful blueprint for Tanzania's future, it must be capable of achievement;

(ii) *Continued mobilization for higher growth*—the targets for each five year plan must aim for an acceleration from the performance of the previous plan. It is through a process of steady and continued mobilization rather than through a short-term "economic miracle" that economic transformation will be achieved.

5. The Second Plan sets out to achieve a rate of growth of gross domestic product of 6·5 per cent per annum, a growth objective close to that set for the First Plan. This represents the growth performance which will have to be achieved if, over the long haul, the economy is to be transformed. Although this is an ambitious target in the short-term, it is not unrealistic. It can be achieved through a maximum effort by the Government, the parastatal organizations and the rural masses.

6. However, the statement of a growth target tells little about real development goals; high rates of growth are sometimes achieved without generating benefits to the bulk of the population, even in the long-run. Also, brief period of high growth can prove to be little more than a "flash in the pan" if healthy foundations for sustained development are not laid.

7. The transformation of Tanzania into an industrialized, urban society will take many decades—even generations. Meanwhile, the lives of the rural people cannot be allowed to stagnate. Even without the achievement of great wealth or industrial might, the material well-being of the Tanzanian people can be improved, if attention is concentrated on the essential ingredients for an improved life for the majority. Basically, if all Tanzanians:

(i) enjoy a healthy diet;
(ii) are adequately clothed;
(iii) enjoy acceptable housing conditions; and
(iv) have access to basic education and health facilities

Tanzania will have achieved more economic success than many supposedly wealthy societies. Planning is therefore increasingly concerned to improve such basic material conditions of the mass of the people. The Second Plan also aims to achieve structural change in the economy to provide the basis for sustained growth over the long period. The objective is to create a high investment, high growth economy in which, on the one hand, rural mobilization and social change have laid the foundation for continuing agricultural expansion, while on the other efficient investment institutions have been developed to provide a local basis for industrial growth. Seen in this light, although increased output during the five years of the Plan period is important, the critical objective is to create an economy capable of high growth over the long period. The strategy of rural development should eliminate those bottlenecks in agricultural production which have checked development in many economies. Further, if the parastatals are able to act as sources of local investment initiative, then the undue dependence on foreign investment, which is a root cause of industrial stagnation, will be avoided.

The fruits of structural change are not reaped immediately; Tanzanian success in economic transformation will be achieved over a series of plan periods. As the economy changes and more dynamic sectors increase in relative importance higher rates of overall growth are achievable.

8. The programme of rural development is fashioned in response to the expansion in the rural labour force expected in the Second Plan period and in pursuit of the socialist objectives we have set ourselves. Only a small part of the increase in the total work force can expect urban employment, even

if the most optimistic hopes for economic performance in the period 1969–74 are exceeded. This means that there will be growing availability of labour throughout the countryside. Rural mobilization is therefore both an economic opportunity and social challenge. More than a million additional adults will become available for rural economic activity during the period 1969–1974; the biggest task facing us is to ensure that this major asset is used to the full in creating development. Self-reliance may be interpreted as, on the one hand, the mobilization of local resources for development, while on the other, avoiding dependence on foreign resources.

9. Increasing imports and excessive dependence on short-term finance, combined with sluggish growth in exports, has led to balance of payments crises and economic disruption in the development programmes of a number of countries which appeared to be otherwise promising. Self-reliance requires restraint in the use of imports, particularly to meet non-essential needs, caution in the acceptance of expensive short-term finance, vigorous efforts to expand and diversify exports, particularly to neighbouring countries, and the development of internal trade so that the expansion of domestic consumption can be matched by increasing utilization of local resources.

10. The First Plan concentrated the Government's energies on expansion in public investment in infrastructure and the rural economy, with a major reliance on the private sector, including foreign investment, for other directly productive investment. It was necessary to build up the basic transport system, the educational system and urban infrastructure. The major directly productive investment by the Government was to be in irrigation and resettlement. The main thrust in industrial investment was to come from private investment.

11. New conditions result in a shift in strategy during the Second Plan. The Arusha Declaration has transformed the situation. Also, a number of underlying economic changes have occurred:

(i) The foundations of socialism must be built in the rural sector. The extension of the principles of Ujamaa now has top priority in the rural programme.

(ii) The Second Plan will implement the policy of rural development through self-reliance. This requires that programmes be aimed at providing development opportunities throughout the countryside and for all sections of the population rather than over-concentration of attention at the centre and on a privileged minority.

(iii) The private sector cannot be relied upon to provide the main thrust in directly productive investment. The Arusha Declaration specifically places an increased responsibility on the public sector to engage in directly productive investment, both in industry and large scale agriculture. During the Second Plan the institutional foundations for socialist development must be consolidated.

(iv) Even though the investment programmes in the arterial transport system and the higher education system will call for continued high investment expenditures, emphasis on expansion in these sectors will diminish in the new Plan. Thus the anticipated increase in available Government funds will gradually be channelled towards projects which have more direct possibilities of immediate output increase. However, investments in Tanzania-Zambia transport facilities, including the development of Dar es Salaam harbour, will be significant enough to affect the balance of the Second Plan.

(v) During the Second Plan, because of the expansion in implementation capacity achieved during the First Plan, Government will be capable of spending in excess of available development resources. There must therefore be increasing attention to the efficiency of investment decisions.

B. *Rural Development.*

12. Rural development is the key both to the achievement of the production targets in the Plan and the social goal of spreading development to the mass of the people.

13. The Plan defines a set of policies along the following lines: —

(i) The Plan emphasises programmes to implement the principles of Ujamaa, and to extend the scope for co-operative and group activity. Major organizational changes have been implemented to ensure general mobilization of support for Ujamaa and to further the long-term objective of creating socialist forms of production throughout the rural sector. Priority is given to small-scale low cost projects by local communities, demanding a minimum of technical and financial assistance, e.g. small-holder and village irrigation schemes, expansion of local storage facilities, development of water supplies for domestic and livestock use, local measures to develop land, grazing and more intensive crop and livestock production, etc.

(ii) Crop priorities are formulated for all major agricultural and livestock commodities. These policies for each crop take account of the need for increased self-sufficiency and improved nutritional levels, expansion of local markets for agricultural and livestock products at prices which are consistent with Government income and wage policies, and maximum exploitation of export markets. High priority crops are tea, flue-cured tobacco, cotton, rice, wheat, cashewnuts, oilseeds, some fruits and vegetables, soya and seed beans. Locally (in appropriate areas) cocoa, copra and fishing will be of importance. Considerable attention will also be directed to the livestock industry. At the other end of the scale, care will have to be taken not to over-produce sisal, coffee, pyrethrum and fire-cured tobacco, all of which face limited markets.

14. The promotion of Ujamaa villages must strike a balance between:

(i) the need for vigorous leadership and official encouragement necessary to ensure that the programme gains impetus and is attempted on a wide scale; and

(ii) the need to avoid the dangers of bureaucratic control, coercion and over-capitalization, which would negate the very principles of self-help and co-operation which the villages are intended to embody.

15. It would be utopian to believe that the Ujamaa principle will spread spontaneously without some concerted leadership efforts. During the Second Plan much experience will be gained in the most effective ways of spreading the practice of Ujamaa throughout the nation. All avenues of advance to the ultimate goal of socialism will be explored, mobilizing the Party, the people and the Government behind the programme.

16. The Plan also takes account of the need for effective measures to promote diversified production in areas which are dangerously dependent on a single crop, and generally in relation to crops for which markets are limited (e.g. coffee) or uncertain (e.g. sisal).

17. In the light of the Arusha Declaration, together with experience gained from the current Plan, the priority for public investment programmes in the rural sector is towards capital extensive forms of production which make the maximum use of local resources including land and manpower. Capital intensive projects have been included in cases where special conditions apply, such as the need to provide raw materials for the development of large-scale processing industries or where they are a first step in the development of new systems of production which will have wider application in the future.

18. The development of rural infrastructure to increase rural productivity and to create an increasingly diversified rural economy will be achieved through:

(i) The exercise of greater responsibility and initiative by local communities at village, District and Regional level in planning, mobilization of resources and the implementation of rural development. The Plan will therefore make increased resources available to activate local enterprise, and to progressively build up the capacity of Regional, District, and village communities as dynamic focal points for accelerated rural development. During the initial stages of the Plan, this will call for the re-allocation of suitable central Government staff to the Regions and the provision of further finance through the Regional Development Fund. These resources are primarily intended to serve a catalytic function.

(ii) Specific infrastructural developments such as feeder roads and storage facilities are accorded high priority where their inadequacy is a factor limiting productivity gains. Attention is also given to reduction of losses during the harvesting, handling and storage of produce at farm and village level. In respect of food crops alone such losses constitute an enormous waste. Measures will also be taken to cut down losses and increase the utilization of livestock. Self-reliance not only implies producing more but also making more effective use of what is produced.

(iii) The educational system will increasingly concentrate on the preparation of youngsters to play a productive role in the countryside. In the past basic education prepared children for further formal learning. In Tanzania primary education will be geared to the needs of the majority in a developing rural economy, while secondary education will be increasingly geared to the vocational requirements of the society.

19. Emphasis on rural development means that the Plan concentrates on agricultural expansion. However, rural economic growth is not solely a question of agricultural expansion. Rural development goes hand in hand with the provision of services to agriculture, an expansion in the supply of commodities and services to meet the consumption needs of the rural population and improvement of the channels of communication through which agricultural output can be marketed. In the countryside the range of possible productive activities is large, including small scale industries, and crafts. The quality of rural life will also be dependent upon the provision of improved services, the expansion of literacy and the development of more effective social institutions through the application of the principles of Ujamaa. Also the Plan would not be complete without a proper concern for the problems of urban development and industrialization, which have an important part to play in the long-term development strategy.

20. In the past, rural development had a heavy colonial bias. "Cash crops" were grown mainly for export overseas, while rural needs for manufactured commodities were met from imports. Thus the pace of development was determined by the condition of foreign markets and the prices at which imports could be obtained—over neither of which did Tanzania have any control. With the growth of domestic urban food markets, the shift in emphasis in policy towards food production and the expansion of the range of goods manufactured in Tanzania the colonial economic pattern will be modified by increased internal trade.

C. *Industry*.

21. In many respects the Second Plan marks a new phase in the industrial development of Tanzania. The range of industrial activity is expanding steadily and the role of the public sector has been extended considerably as the result of the Arusha Declaration. There is therefore a great need for more systematic planning to match the increasing complexity of industry and to provide an effective strategy in this expanded policy area.

22. At the outset of the new Plan the industrial programme will proceed along lines already established in the First Plan period. This involved the implementation of an essentially *ad hoc* set of projects which came under five general heads:

(i) consumer goods with a mass East African market and simple technology;
(ii) further processing of local primary products;
(iii) manufacture of building materials with a high transport cost/value ratio;
(iv) petroleum refining;
(v) industries which supplied productive inputs to agriculture.

23. At the earliest stages of industrial development it is quite satisfactory to implement isolated projects with little reference to an industrial programme. The industrial structure at this stage is very simple; most intermediate inputs are imported, while the bulk of industrial output either takes the form of a final product for the domestic market or is sold for export. However, as industry develops inter-relationships become more complex, the market for one plant's products being provided by the inputs purchased by other firms. Also, after the obvious import substitution possibilities are exhausted, more complex and longer-term considerations must be taken into account in the choice of industries. The Plan therefore contains proposals for more systematic industrial planning and sets out detailed project proposals in a more systematic programme than has been attempted before.

D. *Communications*.

24. The communications section of the Plan is dominated by the heavy investments on the development of the Tanzania-Zambia road and railroad. Expenditures on these two projects will be especially heavy during the first two years of the Plan, when both projects will be under implementation. From the third year, when expenditure on the road should be completed, the burden will be less heavy.

25. Because of the heavy impact of Tan-Zam spending the level of spending on other communication projects will be less than would otherwise have been desirable. Moreover, phasing will be so organized so that there is a bunching of new project implementation in the last two years of the Plan.

The Plan balances two competing objectives:

(i) The implementation of the long-term programme of trunk road development, aimed at eventually providing Tanzania with a grid of four East-West and three North-South first class roads;

(ii) the need to increase emphasis on feeder roads which can connect the agricultural producer and the local area into the main transport system.

26. Difficult choices have been made regarding the timing of trunk route development and of equally expensive airport developments. In making decisions about the programme there has been an increasing effort to evaluate the economic benefits from alternative projects in order to achieve the most efficient results.

E. *Tourism.*

27. The Second Plan includes an ambitious programme of tourist expansion. Tourism is one means of earning foreign exchange which has considerable possibilities of expanding markets. The natural assets of Tanzania in this respect are of great potential advantage. The Plan programme represents a systematic effort to tap the available market by phased development of facilities, which will expand the capacity of the northern tourist circuit, based on the attractions of the northern game parks, and develop tourist facilities on the Coast.

F. *Urban Development.*

28. Although the large majority of the Tanzanian population lives in the countryside the urban areas are expanding at a rapid rate. In recent years urban populations have been growing at an average of over 6 per cent per annum. Although urban populations remain a small minority, the growth of towns has important implications for development. Among other things the growth of towns has important effects on the surrounding countryside, in providing markets for rural products, in offering services and general stimulation and in providing employment opportunities. The nature of urban growth cannot be divorced from the problem of rural development. Funds allocated to the development of towns are not available for rural development; the pursuit of rural development implies restraint in the provisions of urban services. Also urban growth must be planned so as to increase rural development possibilities; the tendency to concentrate most urban development in Dar es Salaam must be checked and a number of alternative urban centres encouraged, to spread the secondary effects of urban growth amongst the major centres of rural population.

G. *Education.*

29. Emphasis in education expansion in the First Plan was at the higher levels of secondary, technical and university training. The programme was geared to meeting the long-term objective of self-sufficiency in most grades of skilled manpower by 1980. Primary expansion was restricted by the scarcity of funds and the priority given to higher level manpower needs. Enrolments in Standard I have grown only marginally faster than the rate of growth in numbers of school age children.

30. Caution regarding primary expansion was a temporary policy, justified by the pressing need to allocate resources to the rapid expansion of higher education. Persistence of such a policy would be incompatible with both socialist ideals and rural development objectives. As pressing high level manpower needs are met, priorities within the educational system change; it becomes proper to

allocate increasing attention to the educational needs of the rural masses. The time for such a shift in emphasis has arrived. The Plan will therefore include provision for a considerable acceleration in the rate of growth of primary education with a view to eliminating the Standard IV Examination and providing a full seven years primary education by 1974 and achieving universal entry to Standard I by 1989.

31. Educational planning is not just a matter of setting targets for the number of students to be in school—it is also a matter of ensuring that the right things are learnt. The Government is already committed to a transformation in the content of primary education towards an emphasis on the needs of the school leaver who must make his life in rural society. Effective implementation of this intention will require steady effort over the Second Plan. At the higher levels of the educational system the effect of systematic manpower planning during the First Plan has been to shift the emphasis of secondary school and post-secondary education dramatically in the direction of science and science-based technological training and away from the traditional emphasis on arts subjects. The Ministry of National Education is now preparing means of making this shift more thoroughgoing, by gearing the higher educational system increasingly to meet the practical needs of the society. In the higher educational system, there will be a shift towards emphasis on technical education. Also, with higher education available to only a small cadre, education must be made available on a mass basis to the adult population. During the Plan, opportunities will be made available throughout the country for large numbers of adults to acquire a clearer understanding of the obligations of a self-reliant society and the possibilities for contributing to the Nation's development through an expanded programme of adult education.

H. *Housing Development*.

32. In the past, housing development has been predominantly a matter of self-help in the countryside and private commercial investment in the towns. The public sector has, during the First Plan, made a significant contribution to slum clearance and urban housing investment, mainly in Dar es Salaam. However, the average cost of this programme has prevented its extension to any but a small minority of city dwellers and, with scarcity of resources, would be unlikely to cope with future housing needs.

33. During the Second Plan public investment in the urban sector will be concentrated on:

(i) the provision of low and medium cost housing at cost levels substantially below levels previously in force;

(ii) provision of on-site development to allow for expanded self-help efforts directed at providing decent urban housing;

(iii) the provision of urban services at a modest cost, in an equitable fashion to meet the needs of the mass of urban dwellers, and, according to the principle of self-reliance, placing the burden of finance for such services on the shoulders of the urban users.

34. Government housing policy will also aim to achieve the extension of improved rural housing techniques of a kind which can be adopted by the rural population, improving on traditional building techniques with a minimum of capital cost.

I. *Health.*

35. During the First Plan, scarcity of resources and the heavy priority placed on other sectors, such as education, resulted in substantial neglect in the development of health services. Although continued financial stringency demands the restraint in the growth of health expenditures, the Second Plan will allocate much more substantial resources to health development than was possible in the past.

36. Past expansion in medical training will begin to bear fruit and continued expansion of training facilities will ensure a steady future growth of medical personnel, which is likely to be even more important than capital investment programmes in improving the coverage of medical facilities.

37. Although the intention is to concentrate on the expansion of *preventive medicine*, the poor initial state and heavy capital costs of *curative* facilities (notably hospitals) inevitably results in developments in curative health facilities demanding an important share of the available capital.

J. *Regional Strategy.*

38. Tanzania is a big country with diverse natural resources. For various historical reasons, the development of economic potential has been very regionally unbalanced. During the Second Plan the government will strive to redress the regional imbalance by promoting an economically effective regional division of labour, which incorporates a much more positive role for regions neglected in the past and by so doing taps unutilized human and natural resources.

K. *Implementation Machinery.*

39. Implementation will require a great mobilization of effort, not only by the Central Government, but also by the parastatals, peoples organizations and the bulk of the rural and urban populations. To achieve the goals of the Plan, the Government will make the necessary institutional adjustments to ensure maximum mobilization in all sectors and at all levels of the society.

CHAPTER II

FIRST PLAN PERFORMANCE

A. *Introduction.*

The First Plan set three major long-term objectives. These were, by 1980—

(1) to raise the per capita income from Shs. 386/- per annum to Shs. 900/-;

(2) to be fully self-sufficient in trained manpower requirements;

(3) to raise the expectation of life to 50 years.

2. The Plan also set out detailed five year output and capital targets. It is still too early to evaluate performances for the whole Plan period; however, it is important to set out the main highlights of achievement and failure, as they will increase understanding of what is being attempted in this Plan. A more complete evaluation of the First Plan experience will be appropriate after completion of the Plan period. Also, in a number of chapters of this Plan progress in particular sectors is reviewed as a background to the new programme.

3. The statistical basis on which the Plan was based was necessarily limited. During the First Plan period significant steps have been taken to improve the availability of information for planning—the Population Census, and a series of surveys of industry have significantly increased the availability of information. For example, the 1967 Population Census demonstrated that population growth is considerably higher than had been previously thought—growing at 2·7 per cent per annum rather than the 2·2 per cent projected in the First Plan. Only now are steps underway to undertake the first census of agriculture; estimates of output and local sales of foodstuffs are still inadequate, so that growth of large areas of economic activity cannot be reliably estimated.

4. Nevertheless, certain central themes clearly emerge when Plan performance is considered.

5. In some areas, substantial success was achieved. This is true of manpower training targets. It is also true of output targets for a number of the most important crops. There were also, however, inadequacies. For example, implementation bottlenecks in the first year of the Plan were much greater than expected, so that development momentum only built up towards the later part of the Plan.

6. Changes in the sectoral balance within the Plan have resulted from three main causes. In certain cases policy decisions following the publication of the Plan have changed the national priorities. Notably, this was the case in relation to the de-emphasis of the settlement programme and to the massive attention to the development of Tanzam communications, following U.D.I. In other cases, the Plan had to be constructed on the basis of limited or highly uncertain information, and subsequent developments led to a re-assessment of the feasibility of projects. The change in plans for the sisal industry is a case in point, where the situation changed from one in which it was appropriate to aim at a sizeable growth in the industry to one in which concern must be concentrated on consolidation and diversification. Finally, differences in implementation capacity between sectors have resulted in differences in the balance of emphasis from that which would have been desired. This has affected the timing as well as the balance of the sectoral

programmes. For example, the easing of bottlenecks in the implementation of road building programmes led to a fast build-up of spending on communications and a heavy bunching of road projects in the last two years of the Plan.

7. It is, of course, dangerous to judge the success of Plans merely from the standpoint of the amount of investment spending which has been achieved. The ultimate test of the Plan lies in the eventual productivity of the programmes implemented. However, it should be noted that the First Plan had a heavy bias towards infrastructure. During the colonial period efforts to build up the transport and educational systems had been completely inadequate. The first tasks to be tackled were therefore the development of basic facilities. The economic returns from expansion in education and in physical infrastructure are very real, but are neither immediate nor readily measured in any simple fashion. The rewards from investments in such sectors in the First Plan should be reaped in the Second and subsequent Plans. Nonetheless, during the period since independence and especially since the beginning of the Five Year Plan a significant augmentation of the trend in growth of domestic product has already been achieved.

8. It must also be recognized that the most important source of expansion in the Tanzania economy is the enthusiasm and efforts of the people, working on the land throughout the country. Large projects in the Plan will facilitate their efforts—agricultural expansion, for example, requires transport development. However, rural development depends on the mobilization of the mass of the population in thousands of projects and requires spontaneous enthusiasm from below and decentralized leadership at the local level.

9. The importance of local efforts on projects too small to be incorporated in the Plan and too dependant on local conditions to be designed at the centre, has been increasingly recognized, particularly following the Arusha Declaration.

10. An important innovation during 1967/68 was the creation of the Regional Development Fund, to increase resources available for implementation of projects in the regions. The Fund finances small scale directly productive projects in the Regions, which are organized, designed and implemented at the Regional level. The Fund was created to finance projects which would typically be too small to be included in the Central Government Development Budget and to allow local initiative greater play than is typically possible in the context of centralized development programmes.

11. The most significant economic strategy and policy developments resulted from the formulation and implementation of the Arusha Declaration. The Declaration re-examined and clarified Tanzania's development strategy following the initial consolidation of political independence and the first experiences in coherent national development plannig.

12. Central principles in the Declaration and its implementation are: Self-reliance, Rural Development, National Control of the Economy, Socialism and Equity. The first is based on the fact that only Tanzanians are either primarily concerned with, or capable of achieving, national development in Tanzania. From this follow programmes to secure increased domestic resources mobilization at all levels, concentration on areas of development in which Tanzanian efforts can be most successful, and seeking increased self-reliance jointly with other States in the Eastern African region. The achievement of a high degree of financial self-reliance during the Plan is demonstrated in Section "C" of this chapter.

13. The emphasis on rural development has been reflected in the work on the Second Plan, the results of which are presented in this document.

14. National control over the major economic decisions taken in Tanzania is vital to implementing both the policy of self-reliance, and its corollary, rural development. Further, public sector control over the majority of large scale modern economic activity is essential to laying a basis for the construction of socialism.

15. The most dramatic steps taken to implement this aspect of the Arusha Declaration were the nationalization of banking, insurance business, milling, and import-export in February 1967, and the subsequent acquisition of interests in mining, cement, tobacco products, tins, and pyrethrum extract under the Industrial Shares (Acquisition) Act and of a majority interest in the sisal industry under the October, 1967 Tanzania Sisal Corporation Act. By mid-1968 organizational and managerial issues had been tackled and the new parastatal bodies were operating at least as efficiently and profitably as their predecessors and in several cases distinctly better.

16. With the nationalization and expanded parastatal investment programmes, the parastatal sector now controls a significant majority of large scale productive activity. Jointly parastatals, co-operatives, Government bodies, and Tanzanian small farmers account for perhaps three-fourths of monetary gross domestic product. Thus the foundations for national control over the economy were firmly laid. The pressing needs to speed training of citizen technical and managerial cadres and to expand parastatal investment capacity and ability to attain rising investible surplus to plough back into the economy have been recognized and a series of manpower and organizational development programmes begun.

17. Equity and socialism entail not merely national, or even public sector, control over the economy but also a just distribution of income. Steps towards a more equitable distribution, e.g. the higher civil service and politician salary cuts at the end of 1966, preceded the Arusha Declaration. Since then the separation of political and public sector leadership from private business has been enforced and an overall revision of parastatal terms of service to attain equitable and comparable structures throughout the public service has been undertaken. An income and prices policy has been established. Machinery has been set up to ensure that excessive wage increases do not redistribute income from the poorer rural to the less poor urban communities and that unjustified price increases on necessities do not reduce the standard of living of consumers by allowing excess commercial or industrial sector profits, whether in the private or the parastatal sector. Wage increases which are to be linked to productivity gains, are held to an overall ceiling of 5 per cent a year, and must be approved via the Permanent Labour Tribunal. A National Price Control Advisory Board has begun operation to secure just and uniform price levels for basic consumer goods and, in particular, to prevent discriminatory pricing between individuals and unjustified increases. Subsequent fiscal policy emphasized new taxes on relatively high income groups and altered the balance of both recurrent and capital expenditure in favour of rural areas.

18. The Arusha Declaration, and its subsequent implementation, was thus a response to the experience gained during the Plan in tackling the problems of economic and social development, while on the other, it provided a quite new context for the preparation of the Second Plan.

B. *Overall Growth.*

19. It is still too early to evaluate performance for the full Plan period; full information on outcome for fiscal year 1968–69 will not be available until early 1970. Nevertheless, the broad trends are evident and can be reviewed, to provide a setting for consideration of detailed Second Plan targets.

20. The target rate of growth of Gross Domestic Product has not been achieved. The First Plan set out to raise the rate of growth to 6·7 per cent per annum. The available data on gross domestic product make it difficult to assess real performance, because of the inadequacy of the material on a number of sectors and, in particular, the difficulties to be overcome in making allowances for price changes. Making allowances for such inadequacies it seems that actual growth has been in the range 4·8–5·2 per cent.

21. Detailed examination of Sectoral performance against Plan targets indicates the following causes of the shortfalls: —

(a) there was some short-fall in crop husbandry, largely the result of the poor growth of sisal output following the sharp change in market prospects in 1965;

(b) although there has been an impressive acceleration in industrial activity this has not yet generated industrial growth at the very high rates suggested in the Plan;

(c) the rate of growth in the construction sector has been up to target in money terms, but in the early part of the Plan a significant part of this growth was dissipated in rising construction prices, a tendency which was checked in the later years of the Plan;

(d) the First Plan document overestimated the rate of growth which would be generated in the Services sectors as a result of a given rate of growth in directly productive sectors.

22. Nevertheless, rates of growth for key sectors in the period since 1960/62 (chosen as the base period for the First Plan) have increased considerably. Some examples of detailed performance, as compared with the 1954–61 period are set out in the following paragraphs.

TABLE 1
CROP HUSBANDRY SUMMARY
MARKETED QUANTITIES

Principal Cash Crops	1960-62 Average ('000 Tons)	1964 ('000 Tons)	1965 ('000 Tons)	1966 ('000 Tons)	1967 ('000 Tons)	1968 ('000 Tons)	1970 Original Plan Target Tons)	GROWTH RATE 1960/62-1968 %	GROWTH RATE 1960/62-1970 required %
Sisal	205·6	229·9	214·2	221·5	216·6	193·8	270·0	— 0·8	+ 3·6
Lint Cotton	34·0	52·4	66·0	77·6	69·0	50·7	81·0	+ 5·9	+10·3
Clean Coffee	24·0	31·3	37·6	48·7	44·0	49·2	49·0	+ 10·8	+ 9·8
Cashewnuts	45·8	72·9	73·1	81·2	75·3	105·0	85·0	+ 12·6	+ 7·4
Sugar	32·2	60·5	66·3	69·9	70·6	81·1	105·0	+ 14·1	+14·0
Tea	4·1	4·7	5·6	6·7	7·0	7·8	10·5	+ 9·6	+10·8
Tobacco	2·2	2·1	5·1	5·2	7·7	7·1	5·6	+ 18·2	+11·0
Pyrethrum	1·7	2·3	3·6	4·4	6·6	4·7	5·5	+ 15·6	+14·2
Wheat	11·5	19·1	30·1	32·8	28·2	27·4	35·0	+ 13·2	+13·0
Groundnuts	16·2	16·8	9·3	8·3	10·1	14·0	45·0	— 2·1	+12·0

(b) VALUE

Million Shillings

Principal Cash Crops	1960/62 Average	1964	1965	1966	1967	1968	1970 Target	GROWTH RATE 1960/62-1968 %	GROWTH RATE 1960/62-1970 required %
Sisal	285·3	468·7	279·9	254·2	203·8	154·6	486	—8·4	6·1
Cotton	114·0	172·7	224·2	247·2	223·0	173·6	316	6·2	12·0
Coffee	109·3	164·2	209·7	252·5	221·9	232·5	244	11·4	9·3
Cashewnuts	26·5	46·6	62·6	74·6	63·0	82·5	62	17·6	9·6
Sugar	29·0	55·6	61·0	64·3	65·0	74·6	92	14·4	13·7
Tea	30·7	30·5	36·9	43·8	46·0	47·7	86	6·5	12·1
Tobacco	10·6	12·2	27·9	18·9	28·4	30·1	28	16·1	11·4
Pyrethrum	7·9	12·2	20·0	23·9	34·0	18·8	28	13·2	15·1
Wheat	6·1	12·5	17·8	18·4	17·5	14·8	—	13·5	—
Groundnuts	16·0	15·6	10·1	7·7	9·0	12·6	50	—3·4	13·5

23. Crop performance has, in a number of cases, been impressive. Crop targets for the Second Plan were set in terms of 1970. Targets for cashewnuts, tobacco and pyrethrum had already been met by 1967. The coffee target was virtually achieved in the 1966 season. The cotton target was almost reached as early as 1966 but in two bad seasons subsequently output growth was checked; however, there is every likelihood that the Plan target will be met by 1970. The same is true for wheat. In the case of tea there is likely to be a slight short-fall in meeting the target by 1970, but growth has been at a high rate.

24. The most substantial short-falls are in relation to sisal and groundnuts. In the case of sisal, the First Plan was in error in offering an over-optimistic estimate of market prospects. The price of sisal dropped drastically in 1965 and output has not subsequently reached 1964 level. In the case of groundnuts at existing prices farmers have found it more attractive to grow other crops, so that there has been substantial decline in production over the Plan.

25. Overall, therefore, the performance has been impressive, with output targets being met for most crops, and being significantly bettered in a number of cases. The picture has been mainly blemished by a change in conditions outside Tanzania's control, namely the decline in world sisal prices. Since 1960/62 the growth in marketed agricultural output has risen to around 6 per cent per annum, compared to 3·5 per cent per annum in the 1954/61 period.

26. Industrial growth has been over 10 per cent per annum, after allowing for price increase, which compares to growth of 5·8 per cent per annum in the period 1954–61. Output generated by projects now coming into production is likely to push the rate of manufacturing growth up still further by 1970.

27. High rates of expansion in existing industries, such as textiles, brewing, plywood and paints, plus the creation of new industries, such as cement and petroleum refining have contributed to the high rate of industrial growth.

28. The manufacturing sector only accounted for 4 per cent of G.D.P. in 1960/62. Starting from such a low base, the high growth rates achieved will result in an industrial sector which will account for only 6–7 per cent of G.D.P. by 1970. Allowing for inadequacy in the data, this is not greatly out of line with the Plan objective for structural change, which aimed to have 7·5 per cent of G.D.P. originating in manufacturing by 1970. However, although considerable acceleration in manufacturing growth was achieved, it must be admitted that there was not a close correspondence between the projects implemented in the Plan period and those envisaged in the Plan document. It is a sector in which a quite different pattern of investment possibilities emerged after Plan publication than that envisaged at the time of Plan formulation.

29. The deviation between planned growth in the service sector and actual performance is large. However, standard statistical methods tend to underestimate this expansion. Growth is measured by employment in this sector. In a period at the beginning of which there were dramatic increases in minimum wages there were undoubtedly increases in productivity in the service sector which are unrecorded. This is one sector, therefore, where real performance has been much better than the existing statistics suggest.

C. *Captial Formation.*

30. One of the important objectives of the First Plan was to mobilize a much higher rate of investment. An investment target for all sectors of gross fixed investment totalling Shs. 4,920 million was set. Of this total direct investment,

by the Central Government was to come to Shs. 1,447 million. In addition the Central Government was to invest Shs. 593 million in the parastatal sector. A carryover of Shs. 140 million Central Government projects from the previous Three-Year Development Plan was added to these totals.

31. It will not be possible to tell until well into 1970 what the final outcome will be for the five year period. However, based on the estimated performance through to 1968 the likelihood is that total investment may reach about 90 per cent of the planned target. Allowing for increases in prices this may represent a real achievement as low as 75 per cent of the planned target.

32. There was a particularly serious shortfall in the first two years of the Plan, when it was intended not only to implement Second Plan projects, but also to complete First Plan carryover. Under performance by the Central Government in relation to developments pending targets in the first year (1964/65) was serious enough to raise questions at the time regarding the feasibility of the Plan.

33. However, although it was evident that mistakes were made at the outset of the Plan in underestimating implementation bottlenecks, subsequent expansion was impressive. Central Government development spending was increased from Shs. 184 million in 1964/65 to Shs. 308 million in 1967/68 (not including finance going to parastatals). With a further increase expected in the final year of the Plan, this rate of expansion is creditable. Based on rough estimates for the outcome of 1968/69, this represents an achievement of about 91 per cent of the First Plan target excluding Three Year Plan carryover, or 83 per cent when the carryover is included.

34. The percentage share of monetary gross domestic product allocated to investment was increased from 14·5 per cent in 1963 to 19·4 per cent in 1965. In the last two years of the Plan it is likely that it will be in the 21–23 per cent range.

35. The overall picture which emerges is one of considerable mobilization, although a gap remains between desirable objective and achievement.

36. The investment of the Plan appears more impressive, however, when the actual financing is compared with that envisaged in the Plan. The First Plan made the mistake of placing an excessively heavy reliance on external sources of finance. In the case of the Central Government, for example, the scheme of finance envisaged in the Plan involved 78 per cent of investment being financed overseas and only 22 per cent being raised locally. In practice, the outcome was quite different. During the first four years of the Plan, domestic sources contributed some 65 per cent of the finance of the Central Government development programme. In absolute terms Shs. 708 million was raised locally over four years, compared to a five year target for domestic finance of Shs. 450 million. This achievement was made in the context of a cautious policy of residual finance, which throughout made only a minor contribution. Over the first four years of the Plan domestic resource mobilization for the Central Government development budget was more than doubled.

37. This record of self-reliant finance was one of the major achievements of the First Plan, as it has laid the foundations for a sustained programme of investment in subsequent years.

38. The balance of payments estimates of the First Plan were neccessarily quite rough. Foreign trade outcome has been roughly in line with Plan projections. Second Plan expectations for 1969/70 export/import performance are very close to First Plan targets for 1970. (The Second Plan predicts 1969/70 imports at shillings 1,997 million and exports at Shs. 1,982 million compared to 1970

targets of Shs. 2,000 million and Shs. 1,900 million). Outcome on invisibles and capital account deviated widely from Plan expectations because of the much more self-reliant pattern of finance. The negative balance on invisibles and required capital inflow have both been much smaller than was expected in the Plan. It has been possible to accumulate external reserves at satisfactory rate to provide liquidity for fast expanding external trade needs.

TABLE 2

GROSS FIXED CAPITAL FORMATION

BY TYPE OF ASSET

(AT CURRENT MARKET PRICES)

Asset	1960-62 (Million Shs.)	1963 (Million Shs.)	1964 (Million Shs.)	1965 (Million Shs.)	1966 (Million Shs.)	1967 (Million Shs.)	1968* (Million Shs.)	Growth 1960-62-1968 % Annually
Building:								
Residential	80	68	101	122	95	110	114	5·3
Non-residential	88	100	105	132	144	138	173	10·1
TOTAL ...	168	168	206	254	239	248	287	8·0
Construction:								
Water Supplies	23	20	30	43	26	26	40	8·2
Communications	32	29	26	38	62	79	99	17·5
Railways and Harbours	42	24	24	15	17	24	18	−11·4
Other	44	65	69	100	85	121	86	10·0
TOTAL ...	141	138	149	196	190	250	243	8·1
Equipment:								
Transport	62	59	89	107	176	242	221	19·9
Machinery	123	120	127	208	250	263	294	13·3
TOTAL ...	185	179	216	315	426	505	515	15·7
Grand Total ...	495	485	571	765	855	1,003	1,045	11·3
Monetary G.D.P. ...	2,799	3,342	3,801	3,948	4,391			
Percentage share of Gross Investment in G.D.P. at current market prices ...	18·8	14·5	15·0	19·4	19·5	—	—	—

Source.—Central Statistical Bureau.

*Provisional.

TABLE 3

DEVELOPMENT SPENDING BY MINISTRY

'000 Shs.

Ministry	(1) 1964/68 Actual Expenditure	(2) 1968/69 Estimated Expenditure	(1)+(2)	1964/69 planned Expenditure, including 3 Year-Plan carry-over	Plan Performance (%)
Comworks (inc. Labour)	307,221	177,000	484,221	400,258	120·9
Landsurvey	166,281	48,431	214,712	420,750	51·0
Education	138,390	10,982	149,372	289,340	51·6
Agriculture	92,117	44,716	136,833	126,170	108·4
Defence and National Service	71,867	28,000	99,867	60,662	164·8
Home Affairs	38,447	3,684	42,131	57,486	73·1
Treasury	33,285	1,070	34,355	3,000	1,145.1
Information	27,777	1,100	28,877	20,880	138·8
Local Government and Housing	18,477	5,204	23,681	54,000	43·8
Mincom. (inc. Co-op.)	20,822	1,072	21,894	92,204	23·7
Maendeleo (exc. Reg. Admin.)	23,133	24,076	47,209	32,792	143·9
Health	13,722	3,820	17,542	31,800	55·1
Devplan	12,525	1,440	13,965	—	—
Foreign	3,532	190	3,722	6,000	62·0
Second Vice-President's Office	1,437	—	1,437	3,018	47·5
Justice and Judiciary	1,002	252	1,254	3,198	39·2
Central Establishments	381	255	636	—	—
TOTAL	970,416	351,292	1,321,708	1,601,558	82·6

Source.—Ministry of Economic Affairs and Development Planning.

This does not include external direct contribution to projects of more than Shs. 150 million over the Plan; this is particularly important in the case of Education and Health, making their performance much closer to Plan targets.

TABLE 4

FINANCING THE PUBLIC SECTOR: JUNE, 1964–JUNE, 1968

	Planned Scheme of Finance		1964/65		1965/66		1966/67		1967/68		1964/68	
	million Shs.	%	million Shs.	%	million Shs.	%	million Shs.	%	million Shs.	%	million Shs.	%
Internal (Including contribution from Recurrent Budget and Domestic Borrowing, etc.)	450	22·0	125·30	61·5	154·57	64·9	167·13	56·7	261·29	75·5	708·29	65·5
External	1,590	78·0	78·55	38·5	83·50	35·1	127·27	43·3	84·62	24·5	373·94	34·5
TOTAL ...	2,040	100·0	203·85	100·0	238·07	100·0	294·4	100·0	345·91	100 0	1,082·23	100·0

Source.—Ministry of Economic Affairs and Development Planning.

D. *Structural change in the Rural Sector.*

39. The First Plan contained ambitious targets for structural change in the rural sector, alongside the specific production targets discussed in Section "B" of this chapter. The efforts to change the character of rural life were focused on the "Transformation Approach", which was to be implemented through 69 village settlements. These settlements were to be expanded at a high rate in subsequent Plan periods, so that by 1980 about one million inhabitants would be living in newly opened up areas, participating in high productivity activities.

40. Although some schemes were successful, it became evident during the Plan that the "Transformation Approach", as then conceived could not be the basis for the widespread structural change required. The schemes were expensive in the use of capital, including social overhead facilities. On the one hand, this meant that in light of the scarcity of resources, the programme could touch relatively few people, while on the other there was the danger of burdening the settlers with excessive amounts of debt. Mistakes were also made in detailed planning, and the schemes placed heavy demands on scarce trained agricultural manpower.

41. Because of the difficulties arising the expansion of the programme was checked in 1966.

42. The lessons learnt from this experience have been instructive in determining the government's new approach to Ujamaa development and to mechanization policy.

43. For the future the government is emphasizing self-help, ujamaa village development, with the maximum mobilization of local leadership. These policies are discussed at greater length in the next chapter.

44. During the Plan, fast rates of growth in agricultural output ensured income growth in some rural districts. However, the picture was quite patchy. In some cases output increase was offset in part by decline in world market prices. There was also wide variation in the degree to which output growth was achieved. It became evident that some areas were in danger of stagnation and that high rates of growth for a few key cash crops, although desirable, would be insufficient to ensure a general improvement in rural well-being. There was also some danger that the growth in urban employment and urban income levels would create a considerable gap between town and countryside, and would lead to the concentration of the younger generation's ambitions on the move to the town and the achievement of urban employment.

45. It was in this context that the Arusha Declaration emphasized the need to concentrate attention on rural development, and the need to mobilize the rural people to achieve such development. The policies incorporated in *Education for Self-Reliance* aimed to direct the education system towards meeting the needs of rural development. The government's wages, incomes and prices policy, instituted in 1967, aimed to moderate the gap between rural and urban income levels.

46. Thus strategy adopted in the First Plan document was drastically modified as the Plan proceeded, most notably through the Arusha Declaration, and the elaboration of policies on Education for Self-Reliance and Ujamaa Vijijini.

E. *Manpower and Education.*

47. One of the main objectives of the Plan was to achieve full self-sufficiency in trained manpower requirements by 1980. To achieve this it was necessary, during the First Plan, to rapidly expand higher educational facilities to produce the required skills. This had to be done in a phased programme, however, to avoid an over-expansion in highly expensive higher educational facilities.

48. To achieve the long-term goal ambitious targets were set for secondary university and technical education. Overall these targets have been met. Tabl 5 shows the growth in education over the Plan. In 1968, university entrants t the university of E.A. were 534, compared to a 1969 target of 528, entries t secondary school were 7,028 compared to the target of 7,070 and Form entrants were 1,265 compared with the target of 1,280. This represents remarkably close correspondence of 1968 achievement to 1969 targets, an represents one of the most successful aspects of the Plan.

49. There are weaknesses, however, in some areas. Within the overal university entry total a shortfall has occurred in science—maths based subjects because of a low rate of passes in the required subjects at Higher Schoo Certificate level. As such skills are so critical for development activities, thi has caused some concern.

50. The demand for high level manpower has been as predicted in the Firs Plan. The Manpower Survey for the Second Plan indicated that High an Middle level manpower grew from 29,489 in 1964 to 44,096 in the last year o the First Plan. This compares to a forecast of 44,117.

51. Within the context of an expanding employment of High Level Manpowe localization has been proceeding at a satisfactory pace. The localization of th Senior and Middle Grade Civil Service is demonstrated in Table 6. The number of citizens employed in the Senior and Middle Grade Civil Service doubled fron 1964–1968, the degree of localization rising from 57 per cent to 79 per cent The foreign citizens employed are increasingly in the technical science—maths based occupations; their displacement will depend upon the satisfactory expansio of training in such skills. Meanwhile hiring of overseas staff to meet certai scarce skill requirements will continue.

TABLE 5

NUMBER IN FULL-TIME EDUCATION

(Public Schools only)

Type of Education	1962	1963	1964	1965	1966	1967	1968
A.—Primary Education:							
1. Entrants to Primary Education	125,521	136,496	140,340	149,314	154,512	157,196	160,300*
2. Total Enrolment Primary Education	518,663	592,104	633,678	710,200	740,991	753,114	776,600*
3. Number of Teachers (All Grades)	10,273	11,100	12,044	13,576	14,809	15,271	15,918*
4. Primary School Leavers (VII and VIII)	13,730	17,042	20,348	46,647	52,574	60,070	58,767
B.—Secondary Education:							
1. Entrants to Secondary Education	4,810	4,972	5,302	5,942	6,377	6,635	7,028
2. Total Enrolment Secondary Schools	14,175	17,176	19,897	21,915	23,836	25,551	28,157
3. Number of Teachers (All Grades)	789	817	858	1,064	1,151	1,306	1,280
4. Output Form IV	1,950	2,839	3,630	4,558	4,723	5,004	5,737
5. School Certificate Awards	1,000	1,472	1,525	2,295	2,455	2,441	4,530
6. Form V Entrants	286	297	604	780	828	895	1,265
7. Form VI Output	199	275	463	606	768	793	906
C.—Teacher Training:							
(First Year) (All Courses)	942	985	1,180	1,145	1,359	1,292	1,260
D.—Technical Education:							
1. Dar es Salaam College (Full-time)	478	234	518	697	515	577	—
(Part-time)	1,250	1,250	1,585	1,500	1,500	1,500	—
E.—Higher Education:							
1. Entrants to University of East Africa	102	109	173	330	369	511	534
2. U.E.A. Enrolment (All Faculties)	203	305	407	642	740	1,313	1,484
3. At Universities overseas	712	675	720	778	807	713	611

Source.—Ministry of Education.

*Estimates.

TABLE 6

LOCALIZATION OF THE SENIOR AND MIDDLE GRADE CIVIL SERVICE

As of 31st December, 1968

Citizenship of Officers	1961	1962	1963	1964	1965	1966	1967	1968
Tanzania Citizens ...	1,170	1,821	2,469	3,083	3,951	4,364	4,937	6,208
Foreign Citizens ...	3,282	2,902	2,580	2,306	2,001	1,710	1,817	1,619
Total Officers ...	4,452	4,723	5,049	5,389	5,962	6,074	6,754	7,827
Localization (%)	26·1	38·5	48·9	57·2	66·3	71·8	73·1	79·3

Source.—Central Establishment Division, President's Office.

52. Localization outside the government service has been implemented through controls administered by the Labour and Immigration Departments.

53. The First Plan did not lay emphasis on primary education. With the heavy emphasis on higher education, the pace of primary expansion was left to depend on the availability of recurrent resources at the local government level. Total enrolment increased from 634 thousand in 1964 to 777 thousand in 1968. Standard I entrants increased from 140 thousand in 1964 to 160 thousand in 1968. Thus primary school entry has been growing just barely faster than the 2·7 per cent annual growth of population.

54. In relation to adult education, substantial progress has been achieved in providing facilities through the Institute of Adult Education and Kivukoni College. By and large, however, programmes have touched only limited numbers at a fairly advanced level. No major breakthrough was achieved in providing adult education for large numbers throughout the rural areas; that remains a task for the Second Plan.

55. The First Plan included a long-term objective of creating 200,000 additional remunerative jobs by 1980. The increase in non-agricultural employment of 58 thousand jobs from 1964 to 1968 is consistent with the achievement of this long-term goal. Declines in agricultural employment most notably in the sisal industry, have almost entirely offset the employment increase outside agriculture.

TABLE 7

TANZANIA WAGE/SALARY EMPLOYMENT 1962–68

	July 1962	July 1963	July 1964	July 1965	July 1966	July 1967	July 1968 (Provisional)	% Change from 1962
Non-agricultural ...	193,183	174,812	187,662	194,333	210,274	224,394	245,200	+27·0
Agriculture/Forestry	203,845	165,532	163,589	139,162	126,223	124,187	109,700	—46·1
All Industrial Divisions	397,028	340,344	351,251	333,495	336,497	348,580	354,900	—10·6

F. *Commerce.*

56. The First Plan contained objectives both in relation to the wholesaling of primary products, and retail and wholesale trade in consumer goods.

57. In relation to primary produce, it was the intention to extend the marketing board system to all products. This was substantially achieved, although a large proportion of purely local trade in foodstuffs by-passes the marketing board system.

At the same time there has been a considerable expansion in the trade of the co-operatives. The number of registered co-operative societies doubled between 1961 and 1968; by September 1968 there were 1696 registered societies.

58. The tremendous expansion achieved was not without growing pains. In 1966 it was found necessary to appoint a Special Committee of Enquiry into the Co-operatives and the Marketing Boards. The reforms proposed by that study are being implemented. The consolidation and improvement of the agricultural marketing system will remain a high priority in the Second Plan. Nevertheless, despite the problems which have arisen the syetem has worked remarkably well, handling a fast expanding volume of business over the Plan period. This system is now firmly established, and as the efforts to improve efficiency bear fruit, it will be an increasing source of strength in the rural economy.

59. In relation to retail trade in consumer goods, the objective of achieving a co-operative share of 30-40 per cent of total volume by 1970 will not be achieved. The retail co-operative system outlined in the Plan was implemented but did not prove successful and had to be abandoned in 1966.

60. An increased public participation in wholesale trade was successfully achieved, however, initially through the operation of COSATA and INTRATA and from February, 1967 through the State Trading Corporation, formed through the amalgamation of several large private companies and the two parastatal firms. By the end of the Plan the State Trading Corporation has established itself as the major importer of consumer goods, other than vehicles.

61. The failure to establish an effective retail consumer co-operative movement was one of the most serious short-comings of First Plan implementation.

G. *Economic Integration.*

62. One important achievement in the Plan period, although necessarily not part of the Plan itself, was the negotiation of a more satisfactory set of arrangements for trade and for joint operation of common services with Kenya and Uganda. The East African Community is now based upon formal treaty arrangements and a more effective set of institutions; the full implementation of the treaty and the operation of its provisions over a number of years will, it is hoped, ensure that all partner states will eventually reap a fair share of benefits from the Community. The actual pattern of trade, however, remained heavily to Tanzania's disadvantage through the Plan period, although there are signs of slight corrective moves in the right direction following the first impact of the Treaty.

63. Another important development in the direction of improved economic co-operation with neighbouring countries was the development of improved transport facilities to Zambia, with the greatly increased transit of Zambian overseas trade through Tanzania, and a considerable increase in trade between the two countries. With the construction work now under way on the Tanzania-Zambia road and with the planned construction of the Tanzam railway, these developments during the First Plan period are likely to appear in the future as a crucial first step in the fundamental change in the structure of the trade and communications systems of the two countries.

64. With the East African Community now in operation, steps to implement the 1967 Treaty being taken, and with four applications from neighbouring states to participate in the Community, the prospects for future regional economic co-operation are much brighter at the end of the Plan than they were when the First Plan was formulated.

CHAPTER III

THE RURAL SECTOR

The fundamental principles guiding the Plan in relation to the rural sector are:—

(i) That rural development receives top priority, as most of our latent wealth lies in our under-utilized land and in the energies of the rural people;

(ii) That during the Second Plan significant progress will be made towards the goal of socialist organization of rural economic activity, both through the application of the principles of Ujamaa Vijijini and through the expansion of other forms of co-operative productive activity;

(iii) That the desired social change will be achieved in the context of a programme of planned output expansion, based upon a system of crop priorities and the improvement of productivity through energetic promotion of modern agricultural techniques.

A. *Ujamaa Vijijini.*

2. By building on the principles of the traditional extended family system, with its emphasis on co-operation and mutual respect and responsibility, a society will be built in which all members have equal rights and equal opportunities, when there is no exploitation of man by man, and where all have a gradually increasing level of material welfare before any individual lives in luxury.

3. The objective is to farm the village land collectively with modern techniques of production, and share the proceeds according to the work contributed. People who are farming together can obtain the economic advantages of large-scale farming, in the better utilization of machinery, purchase of supplies, marketing of crops, etc. It becomes easier to supply technical advice through agricultural extension officers who can teach a group more easily in one place, rather than travelling from one small shamba to another. It is also easier to provide social facilities like water supplies, medical and educational services, to farmers who live in groups rather than in scattered holdings.

4. The equality of farmers in ujamaa communities, with no divisive class distinctions, creates a healthy and stable social system where corruption, exploitation and inequality of wealth unrelated to work done can be eliminated.

5. Until recently the trend has been in the opposite direction, away from extended family production and social unity, and towards the development of a class system in the rural areas. The immediate objective of the Second Five-Year Plan is to reverse this trend and to search out all possible avenues of advance towards Ujamaa.

6. The inputs required to make a success of an Ujamaa Village are:—

(i) Good local leadership.

(ii) Adequate land with good potential for development or expansion.

(iii) Adequate water for human and animal use.

(iv) Knowledge of agricultural or other techniques by which production can be increased.

(v) Availability of the necessary resources for implementing these techniques.

(vi) Markets for disposal of the surplus production.

(vii) Planned programmes for the productive re-investment of the surplus produced.

7. The best advertisement for Ujamaa is a successful Ujamaa Village. The first essential for successful Ujamaa is that it should come from the people, rather than being imposed from above. The Government will therefore leave decision-making with the people, but will strengthen the people's own endeavours.

8. Although the Ujamaa programme is founded on the principles of voluntary democratic activity, the Party and Government are not relieved of the responsibility of mounting a vigorous programme of promotion. Indeed, the tendency towards capitalist development in the rural areas is unlikely to be checked without a vigorous initiative being mounted.

9. There is a choice which must be made between two alternative strategies:

(i) *Selective.*

10. To concentrate attention on limited areas which are capable of making movement to complete Ujamaa living over a short period of time; that is, to concentrate Ujamaa development on the existing Ujamaa Villages and such new efforts which seem capable of full application of the desired principles.

11. The advantages of this approach is that in the Ujamaa villages a concentrated effort can be made to transform the economic and social life of the people in all its aspects. The few make a major change in their way of life.

12. The disadvantages of this plan is that while a few thousand families in Tanzania are living, or learning to live Ujamaa, the rest of the population continues to live on single-family peasant shambas. Although this first option has the advantage of being selective and of providing a high level of service to a small number of Ujamaa communities and therefore of guaranteeing limited success over a narrow range of activities, we might end up with a situation in which a small lively, high quality Ujamaa movement co-exists with a basically stagnant rural economy.

(ii) *Frontal.*

13. The alternative approach is to move towards Ujamaa on all possible fronts, mobilizing the full range of governmental and political institutions behind the principles of Ujamaa. Under this approach we would seek, in the next five years, to ensure that large segments of the society will make some movement towards socialism. All rural and urban institutions will be expected to seek out a variety of socialist solutions to the range of development problems that present themselves, although not all will achieve complete commitment to fully fledged Ujamaa production during the Plan.

14. The advantage of this approach is that the whole society will be mobilized to pursue the goals of socialist production and living. This will require mobilization of all existing institutions. The aim will be to move all to make at least some movement towards Ujamaa.

15. The frontal, or broad-based, approach has been chosen because of the desire to mobilize the widest possible participation in socialist activity throughout the rural society.

16. The task of Government and other institutions is to explain and encourage. Fledgeling Ujamaa Villages and production co-operatives which need help in getting on their feet. The kind of help they need is ideological and organizational

as much as material. They need to know how an Ujamaa village works, to discuss the concrete problems of organization, to recognize the importance of savings, and to learn improved agricultural techniques.

17. Ujamaa villages need services such as health, education and communications. The relevant Government departments will give priority to groups which have committed themselves to Ujamaa development. Embryo villages may need some type of material assistance, but experience has shown that where this is given indiscriminately or too lavishly it can have adverse effects, diverting the community from its true objective. It is vital that, whatever encouragement TANU, Government or parastatals give to this type of group, they must not try to run it; they must help the people to run it themselves.

18. The specific contribution which Government and other organizations can make towards the development of Ujamaa villages can be summarized as:

(i) Education to explain as widely as possible, the underlying principles of Ujamaa villages.

(ii) Promotion of good leadership among the farmers and commitment among the Government leaders and officials.

(iii) Adequate planning (sites, food cultivation and provision of services).

(i) *TANU.*

19. Leaders of TANU and TYL will play an active part in the establishment of Ujamaa villages, wherever possible by joining ujamaa groups themselves as well as persuading others to do so. The Ujamaa Village Department will be closely involved with Maendeleo in the training of volunteer cadres and in education campaigns. TANU will be the main source of ideological training for ujamaa villages.

(ii) *Maendeleo/Utawala.*

20. An education campaign on a national scale will be launched to explain the meaning and practical implications of Ujamaa to farmers and leaders at all levels. At the leadership level, Government and Party leaders will be fully exposed to the underlying principles of Ujamaa. For the training of village leaders the Ministry, in collaboration with TANU, will train a volunteer cadre of Ujamaa village organizers, who will live with and at the level of the people. Their training will include development of leadership skills, and farm management skills. It will be practical and democratically organized. Teaching materials will be prepared on practical socialism (showing what is really involved in a community living together and working together in harmony, and how socialist theory bears on the practical problems of village life); on practical economics, and socialist farm management (how a communal farm works, questions of work organization discipline, division of proceeds, how to deal with problems posed by communal and private plots, etc.). The village organizers will arrange course on Ujamaa in the districts, and ensure free flow of information between villages, by taking groups of farmers to visit established ujamaa villages, etc. Rural Development Officers in the villages will hold meetings to explain to farmers the advantages of working together; will advise groups on how they can get loans or technical advice; will assist them in laying out their villages, drawing up their constitutions, running their co-operative shops, keeping their accounts, setting up cottage industries, etc.

21. Maendeleo will also implement a planning and research exercise which will aim to identify the different economic systems which could form the basis for Ujamaa production in various parts of the country, and devise programmes tailored

to the diverse rural conditions. For example, the technical problems of organizing co-operative range management differ from those found in tea production, which in turn vary from the cotton situation. Each situation will be studied so that proper guidance on the best techniques of Ujamaa organization can be provided both to farmers and government officers. By this means, productive gains can be reaped from Ujamaa organization from the start.

(iii) *Kilimo.*

22. The Ministry of Agriculture, Food and Co-operatives will be responsible for providing crucially important technical support for Ujamaa development. One of the most important objectives of Ujamaa is to modernize agriculture, creating a framework in which the advantages of large-scale production can be reaped without the negative social consequences of capitalist agriculture.

23. The starting point of the economic success of the Ujamaa community is an effective programme of agricultural expansion. Support for this will come from the agricultural field service; the group will receive guidance in the means of achieving output increases, in light of district crop priorities. Kilimo field staff are receiving instruction in Ujamaa principles to ensure that they adjust their extension techniques to the provision of advice to groups rather than individuals.

24. As the Ujamaa group finds its feet and its agricultural activities are successfully launched, the group will require commercial advice from the Co-operative Development Division so that accounts are kept in good order, and proper financial provision is made for further development.

25. Where possible a combination of agricultural, economic and commercial advice will be combined to provide a simple farm plan for the group, which will enable the productive activities to be expanded in an efficient fashion.

26. Programmes for intensive development being mounted by Kilimo (such as tea development) will incorporate ujamaa principles in their basic planning. Similarly, State farms developed by Kilimo will seek in all possible ways to encourage and support Ujamaa development in surrounding areas.

27. The Water Development and Irrigation Division will give priority to Ujamaa villages in the provision of rural water supplies, supported by the self-help efforts of the villagers. This division will also be responsible for developing village irrigation schemes suitable for Ujamaa groups.

28. Emphasis on development through the individual farmer, which has been the basis of previous extension practice, will be ended.

(iv) *District Councils.*

29. The Councils will give priority to Ujamaa Villages in the distribution of educational and health facilities, and the building and maintenance of feeder roads.

(v) *Education.*

30. The Ministry of National Education will strengthen the place of education for Ujamaa in their syllabi, and increase the practical content of the teaching, with communal school gardens and other activities which pay more than a form of lip service to Ujamaa. It is particularly important that teachers should take an active part in the communal activities. There is no example worse than that of the teacher who refuses to dirty his hands in the school garden, while impressing upon the children the importance and dignity of agricultural labour.

31. Ujamaa will become the basis for the transformation of the rural society; however, its achievement will require sustained effort. Co-operative farming is not without difficulties. A high level of responsibility, commitment and discipline is required of members to improve the means of production and expand resources available to the Ujamaa community. The major benefits will not all be immediate but will depend upon the expansion of productive capacity over the years through the community effort.

B. *State Farms.*

32. The extension of the principles of Ujamaa Vijijini will bring many Tanzanians into collective production activities; it will not, however, provide an answer to all the problems of agricultural organization. Certain agricultural products for which fast output growth is required and which benefit from mechanization and/or large scale irrigation, from organized innovation, and from centralized management of a large scale operation will be produced effectively on state farms. To meet this need over 250,000 acres of new state farms are planned for the Second Plan period.

33. Wheat is a typical case—this is a crop which can be grown efficiently on an extensive mechanized basis. Wheat output targets have been set at an ambitious level, and a number of state farms are being set up to ensure achievement of the target. In the case of dairy production, state farms are being used both as the basis for a systematic expansion of a national high grade dairy herd and as a means for large scale production to help meet the fast growing demand for urban milk supplies.

34. As state farms are somewhat expensive in the use of capital they could not be expected to provide the major contribution to agricultural output in the near future. Their role, however, is not to be seen solely in terms of the output they contribute directly. The farms can serve as an important centre of training in two senses. The Government agricultural service, in the past almost exclusively advisory, will now gain direct experience in productive activity. This experience will provide an effective training for those who will in the future be responsible for providing extension and supervisory services outside the state farm system. The development of a cadre with experience in the problems of farm management is therefore one important objective of the state farm programme.

35. The state farms will also serve as a model, introducing innovation in crops and techniques which can be taken up by Ujamaa groups in the surrounding areas, and provide certain services such as workshop and transport facilities. The state farms provide an opportunity for the support for Ujamaa activities.

36. With the operation of existing public sector large scale agricultural activities, notably under the Sisal Corporation and the National Agricultural and Food Corporation, and with plans for the creation of state farms in the Second Plan period, state farms will command a significant share of the total resources allocated to the rural sector. There is therefore a need for a high degree of discipline from both management and workers. If discipline and effective organization are achieved, considerable returns can be generated, particularly in those areas of the country where availability of land suggests extensive farming.

STATE FARM PROGRAMME

	Numbers	Acreage
Wheat	10	100,000
Rice	4	13,000
Vine	1	1,000
*Dairy	2	—
*Ranches	9	—
Oilseeds	1	4,000
Coconut	2	6,000
	29	124,000

*Acreage not yet delineated.

C. Co-operative Development.

37. One of the most significant developments in recent years has been the growth of the Co-operative Movement. In 1952 there were 172 registered co-operative societies; by 1961 there were 857 and by September, 1968 the number had increased to 1,696, handling over half a million tons of produce annually and paying more than Shs. 500 million to farmers. In addition to playing the principal role in primary marketing of agricultural produce, Co-operative Unions have recently been encouraged to assume increasing responsibility for processing, and, in collaboration with the N.D.C.A., for the supply of agricultural credit. These past successes of the co-operative movement indicate the possibilities of fast expansion in new rural institutions. Many of the problems the movement has had to face will provide insights into the challenges which will arise in the extension of Ujamaa.

38. The co-operative is basically a socialist institution. However, a marketing co-operative, the members of which are small scale capitalists and which itself becomes a large scale employer of labour, will increasingly take on a capitalist character. The co-operative movement in Tanzania is a source of considerable strength for the growth of socialism—it represents a major advance over a private, capitalist trading system. However, if it remains purely concerned with marketing, with the development of commercial farming amongst its members, it will become an increasingly capitalist institution.

39. A central part of the development of rural socialism in Tanzania must be played by the co-operative movement; for it to fill a progressive role, however, it must be revolutionized. Two changes are required:—

(i) The societies must become production orientated through the development of co-operative farming units from amongst their members at the primary level.

(ii) The increased democratic participation of the membership in the control of all co-operative activities.

40. Despite the leading role in primary marketing which has been assigned to the Co-operative Movement, there are many commodities in respect of which co-operatives as yet provide few if any services. In regard to the principal commodities presently handled, there is substantial room for rationalisation and greater efficiency in buying, handling, grading, storage and transportation. In addition to moving towards a more production orientated role for the Co-operative Movement, produce marketing activities will be consolidated.

41. The movement of the Co-operative Movement toward Ujamaa will be achieved in two directions—

(i) through the formation of production based multipurpose societies *de novo*, or from Ujamaa Villages or agricultural associations; and/or

(ii) by orientating marketing based societies towards additional activities more directly affecting production (including the establishment of farming units).

42. The co-operative development programme will make a major contribution to the expansion of the technical skills which will be required for the operation of the co-operative productive activities of the Ujamaa Villages. It will be among the responsibilities of the Division to register productive co-operative and to supply them with the advice and help they need to handle the business side of their affairs. The training programme of the Co-operative Development Division has therefore a very high priority.

43. Quite apart from the new Ujamaa development the recent very rapid increase in the number of co-operative societies and their responsibilities, mainly in the field of marketing and credit has placed a heavy strain on the Co-operative Development Division and the Co-operative Movement itself. The main constraint has been trained manpower, for the Division is seriously short of skilled staff at all levels. The movement requires access to substantially greater facilities for training of committee members and key employees, with a measure of direct assistance in some cases such as management and accounting.

44. The increased training programme proposed for the Co-operative Development Division would absorb about two-thirds of the existing capacity of the Co-operative College, Moshi. In order to cater for the needs of the Co-operative Movement for primary society secretaries and for the intermediate training of society and union staffs, accommodation will be increased at the College from some 150 to about 250.

EXPANSION OF CO-OPERATIVE DEVELOPMENT DIVISION
SUMMARY BY MAIN GRADES

Grade	Present Strength	1973/74 Target	Additional Requirements
Inspectors	192*	640	448
Senior Inspectors	50	210	160
Co-operative Officers	72	129	57
Co-operative Accountants	10	35	25
Senior Co-operative Officers ...	23	40	17
Principal Co-operative Officers ...	7	11	4
Assistant Commissioners	4	6	2
Commissioner/Registrar	1	1	-

*Plus an average of 162 Trainees over the period of the Second Five-Year Plan.

45. A proportion of the Co-operative Inspectorate staff will be trained to serve more specialized requirements in such fields as co-operative production, produce marketing, credit of all kinds, commerce/distribution, processing and storage, and accountancy. There is a need to increase the capacity of societies to handle a rapidly expanding volume of agricultural credit. The handling of more agricultural inputs, and the wider entry of co-operatives into trade and distribution also requires that a limited number of staff should be trained for immediate posting to Regions to assist unions which have reached a stage where they can effectively play a larger role in distribution.

46. The general staffing proposals already referred to will allow a steady development of specialization amongst the Inspectorate staff at District level to be backed by a strong co-operative development and extension team operating

from each Regional Headquarters. The need for a higher proportion of graduates at senior levels than at present, will be met to a large extent from the growing output of Tanzania graduates in commerce and economics from existing courses at the University of Tanzania as well as from its Faculty of Agriculture. The basic degree and diploma courses in Agriculture will be drawn upon increasingly by both the Co-operative Development Division and the Co-operative Movement.

47. In view of the great importance of improved management and accounting, special efforts will also be made to assist Unions and Societies in these fields. In-service training courses at diploma level will also be established in management. In addition to the training of ten Accountants to professional level, some 25 Co-operative Accountants at intermediate level will be trained annually and of these up to 15 will be available for secondment to Unions. Unless accounting at union level is improved there is little hope of achieving lasting improvement at primary society level. The same applies to management. Trainees successfully completing the new up-grading diploma level course in management will be available for secondment to Unions as Assistant Managers.

48. One area in which progress has lagged is in co-operative marketing of livestock and of poultry, eggs, milk and fruit and vegetables, which, being highly perishable, require highly organized marketing facilities. A start has recently been made, however, in these fields and will be given high priority during the Plan.

49. Special attention will also be given to increasing the participation of the Co-operative Movement in the distribution system, beginning with relatively standard, fast moving lines in everyday demand. While the registration of some new consumer societies can be expected, these, on their own, often tend to be vulnerable, and a substantial increase in co-operative trade will almost inevitably involve the systematic development of co-operative distribution at the retail level and in wholesale trade as a complement to and in close co-operation with S.T.C.

50. Progress already achieved in the field of co-operative processing of agricultural produce will also be consolidated and expanded, together with the provisions of transport and storage. Recent studies indicate that losses in store products at village, primary society and, to a lesser extent, at Union level are such that high priority must be given to the improvement of storage facilities and methods of pest control. The adoption of sound designs and standards of construction is particularly important. Sorting, handling and storage of products and their continuous protection from deterioration will form an increasingly important part of the training of all co-operative staff, particularly those who specialise in marketing development.

51. The provision of services to production co-operatives will become an increasing part of the work of the co-operative service. Production co-operatives are to be created in forestry and fishing; the development of small-scale industry will also create possibilities of production co-operatives of craftsmen. The main thrust of development of production co-operatives is to be expected, however, in agriculture as a result of the drive towards Ujamaa.

52. In summary, the Second Five Year Plan will represent a transitional period during which the tradional marketing functions of the co-operatives will be made more efficient, for the benefit of the farmer, while new growth will be shifted sharply in the direction of production and multi-purpose primary societies. The responsibility of the Co-operative Development Division for Ujamaa will be to encourage the existing societies to move in the direction of production activities as well as to provide services to the Ujamaa communities as they develop.

D. *Rural Training.*

53. The Arusha Declaration and the policy statements on Socialism and Rural Development, and Education for Self-reliance, have focussed attention on the vital role of education and training in achieving rural development. Thinking must encompass the role of primary and secondary education, the needs of Ujamaa, the place of political and social education, youth education, National Service, the training of women, the leadership role of TANU, as well as wide range of vocational training for public servants.

54. The long haul towards making rural life more worth living must begin at school level. The reorganization and reorientation of primary and secondary education, and indeed, university education, in accordance with the principles laid down in "Education for Self-Reliance", are primarily the responsibility of the Ministry of National Education, but the more active participation of teachers and pupils in rural development also requires the collaboration of other ministries and agencies. In association with Devplan, Kilimo has recently instituted an experimental project to provide co-operative farming training for youth and primary school leavers. Depending upon the progress achieved, this will be expanded during the next Plan. Provision is also being made in the Plan for the improvement of school gardens, e.g. by laying on water for fruit and vegetables, poultry keeping, etc., wherever this can be done at low cost, and by the supply of seedlings and other basic inputs. Facilities for teaching essential rural crafts and trades, e.g. carpentry and metal work, with emphasis upon the use of local materials and the production of articles of practical value, will also be encouraged in shcools.

55. The extension service will provide support for these educational services, making available the services of selected extension staff to aid in practical and theoretical training in the schools.

56. During the Plan, fundamental changes will be made in the organization of rural training at the district level. As a first step the District Training Centres of Maendeleo, Farmers Training Centres of Kilimo and the proposed rural craft centres of Mincom will be amalgamated, to form integrated Rural Training Centres. Within these centres it will be possible to co-ordinate the various training activities available in each district and reduce costs by sharing overhead costs. This objective will be achieved by expanding existing and proposed specialist centres to become full-scale Rural Training Centres.

57. The Rural Training Centres will be used as a supporting service for the overall rural development effort and, in particular, for the improvement of Ujamaa villages. The facilities of the Rural Training Centres will be expanded in response to local priorities and initiatives, in such fields of handicrafts, home economics, special youth training, etc. Increasingly, the progremmes of the centres will aim to meet a particular need identified in the context of specific development programmes. In addition, vocational, agricultural and craft training for youths will be introduced on a more extended basis than the usual short courses offered at the training centres.

58. Apart from the Agricultural Faculty of the University, which it is proposed to start at the commencement of the Plan, the responsibility for agricultural and associated training (e.g. in forestry, fisheries, veterinary science) is the responsibility of the Training Division of the Ministry of Agriculture, Food and Co-operatives, the Director of which is also a member of the governing body of the Co-operative College, Moshi. The Ministry is therefore responsible not only for training personnel required to staff the Ministry's own departments but also the other Ministries and parastatals who need agricultural Diploma and Certificate holders, as well as for the private sector. The size of the training programme therefore

must meet the needs of a variety of users. The wide range of possible users of trained agriculturalists outside the Government or other paid employment means that the supply of manpower for formal employment opportunities is a minimum target.

59. Apart from the additional requirements for agricultural manpower arising from specific investment programmes and projects, the Ministry of Agriculture, Food and Co-operatives has responsibility for on-going services such as extension and research.

60. Needs have been estimated by identifying the main fields of extension activity at Regional and District levels and establishing the specialist staff necessary to take charge of these lines of extension activity. Provided the basic nucleus of adequately trained staff is there at Regional and District level, the provision of additional staff as and when they become available will enable the scale of such activities to be expanded. Hitherto, extension staff has been in such short supply that with few exceptions, e.g. tobacco, little apportunity has existed for specialization or the allocation of staff to specific programmes. The training programme now envisaged will make this increasingly possible.

61. The table below summarises Kilimo's trained manpower proposals from now until 1979/80, along with the approximate annual training intake required so as to account for the estimated needs of other Ministries, parastatals and the private sector. In aggregate, these involve an annual intake to the proposed Agricultural Faculty of the University College, of some 80; of Diploma students of 200, and of Certificate trainees, about 600.

SUMMARY OF STAFF AND TRAINING PROGRAMME FOR AGRICULTURAL AND ASSOCIATED MANPOWER

Division	Graduates		Diplomates		Certificates	
	As at 11.11.68	Net increase by 1980	As at 11.11.68	Net increase by 1980	As at 11.11.68	Net increase by 1980
Agriculture	213	154	334	456	1,240	1,780
Veterinary	124	73	127	129	446	540
Forest	40	45	62	68	235	544
Fisheries	14	20	13	57	82	244
Game	14	15	21	41	84	256
Sub-Total	405	307	557	751	2,087	3,364
Others†	-	172	-	774	-	1,949
Total ...		479		1,525		5,313

*To achieve these increases annual training requirements must take account of localization, retirement, etc.

†Includes, Co-operatives, Kijiji, Maji, Home Affairs, Elimu, Ngorongoro, parastatals and the private sector.

62. There will be an inevitable time lag between the establishment of additional training facilities and the output of students. The filling of the posts outlined may extend beyond 1980, depending upon various imponderables such as progress in building facilities, the actual rate of drop-out, the effective demand of other users, notably of the private sector and the ability to operate training facilities at more than "full-capacity" in order to achieve particularly fast expansion over selected short periods (without creating permanent excess training capacity). Apart from

the Faculty of Agriculture itself, (which will take over the facilities of the existing Agricultural College at Morogoro) requirements outlined above will call for a new Agricultural College with a capacity of 400 for Diploma courses; and Certificate facilities for 600. The latter will involve the proposed new M.A.T.I., at Mbeya (100 agricultural trainees) and a third (also for 100 agricultural trainees) the site for which is still under consideration. Relatively minor capital expenditure will also be required to meet the needs for specialized training in forestry and fisheries.

63. Both at Diploma and Certificate levels, special attention will be given to training all personnel in the principles of Ujamaa, the increasing role of Co-operatives and subjects such as marketing, credit, the application of crop priorities and farm management. Special training programmes will be provided for selected staff required for development programmes such as tea, dairying, selected foods crops, small-holder irrigation, horticulture and beef and poultry production.

E. *Rural Credit.*

64. Rural Credit includes both the finance for activities directly related to the cultivation, storage and processing of agricultural produce, and the financing of small scale industries and services serving the needs of the agricultural sector.

65. A number of financial institutions service the rural sector. The National Co-operative and Development Bank (N.C.D.B.), with its subsidiaries the National Co-operative Bank (N.C.B.) and the National Development Credit Agency (N.D.C.A.), is the most important institution concerned with the finance of agricultural development.

66. The N.C.B. specializes exclusively in crop finance, that is, loans to co-operatives to enable purchase of crops from growers, receiving its funds from deposits—the majority from the co-operative movement—and crop finance advances from the Bank of Tanzania. The other N.C.D.B. subsidiary, the N.D.C.A., provides development credit, almost exclusively to agriculture, which is directed mainly to small holders through the co-operative movement.

67. The National Bank of Commerce also undertakes considerable rural business. While the N.B.C. is generally regarded as an institution primarily concerned with commercial credit, over 20 per cent of its loans are to the agricultural sector (a major share of which are loans to sisal estates inherited from the pre-nationalization period).

68. The marketing boards also have a significant role in the market for agricultural credit, both as users and suppliers. The Lint and Seed Marketing Board (LSMB), the National Agricultural Products Board (NAPB) and the Tanganyika Tobacco Board (TTB) have all relied on support in addition to their own resources to finance the purchase of crops, drawing on N.B.C. for additional finance when necessary. All these marketing Boards also make fixed investments; the NAPB in godowns and handling facilities, the TTB in tobacco processing plant, and the LSMB in stores, offices and transport facilities. The LSMB also lends on a large scale to co-operatives.

69. A fairly substantial amount of credit is supplied to farmers directly by the co-operatives and similar bodies. A number of co-operatives over the years have accumulated surpluses which are now used for providing credit to members.

70. The most important limits on the effective use of credit are: —

(i) the amount of credit that can be productively employed by co-operative members is constrained by the administrative capacity of co-operative management;

(ii) effective use of credit can only be achieved when farmers are aware of the possible returns from new inputs and have the knowledge to use them productively. Expansion of credit therefore depends upon capacity of extension staff to prepare the farmers for its use.

71. Credit without the know-how to utilize it effectively is a waste of resources and detrimental to eventual development due to the hardening of borrowers' attitudes because of losses incurred. Therefore careful guidance is required on lending policy, with a commercial approach to loan appraisal modified by a flexible attitude towards more marginal development projects in close consultation with Government.

72. The basic channel for the provision of agricultural credit has been through the co-operative society. The co-operative primary society affords a viable loan unit of between 300 and 1,000 farmers. The committee system, with representatives from each village area, gives a personal basis for the evaluation of the intergrity and capability of would be borrowers. This personal evaluation is impossible to obtain at reasonable expense through any other institution. The co-operative, handling the crop on a monopoly basis, also affords a critical facility for loan recovery. The co-operative primary society has collective responsibility for repayment of the loans. With publicity this creates pressures on the individuals to repay and on the officials to administer loans efficiently. Credit offers an incentive for farmers to join the society, and creates pressures from members wanting credit on the officials to be efficient on pain of removal.

73. With the growth of producers and multi-purpose co-operatives, increasingly credit will be made available to such groups, rather than to individual farmers.

74. The development credit specialists in the Co-operative cadre will facilitate the increasing effectiveness of the co-operative movement as a channel for the disbursement of credit.

75. The N.D.C.A. will have an expanded programme of lending during the Plan which is currently estimated at Shs. 145 million net lending.

76. Studies are underway for the creation of a Rural Development Bank, with expanded functions and resources for the finance of the full range of rural development activities.

F. *Mechanization.*

77. The tendency in the past to think of mechanization primarily in the context of tractorization has led to the neglect of opportunities to improve hand and animal-drawn equipment, the need for simple processing equipment, water lifting and reticulation devices, and on-farm transport such as ox-carts and trailers, as well as feeder transport vehicles. Until about eighteen months ago, when the inadequacy of this approach was recognized, there had been a concomitant neglect of mechanical training and the provision of facilities for the better use, repair and maintenance of the less spectacular forms of mechanization, as well as of tractors themselves. During the Second Five-Year Plan, these faults will be corrected through a more balanced programme of mechanization and the provision of effective supporting services.

78. Tractors and other expensive forms of mechanization will be introduced in carefully selected areas after study has proved their viability. Tractors have a place provided they are matched with appropriate equipment, and will be used in circumstances where they are technically and economically desirable. In applying economic criteria to the use of tractors and other capital-intensive machinery, proper consideration will be given to the high import content of such equipment, including spare parts and other running costs. Such machinery services may be based either upon Co-operatives or State Farms.

79. In the southern parts of the country, efforts will be made to increase cattle populations, giving high priority to draft oxen and training in their use, so as to reduce dependence upon hand labour. Some of the advantages of mechanizing field operations—increasing acreage under cultivation, more rapid performance of operations leading to timely planting and harvesting, and improvement of quality and price as a result of better and more timely cultivation and reaping—may be achieved through the more effective use of ox-drawn equipment. Where oxen are in short supply, or where the intensive nature of land use sets a limit to the availability of grazing and fodder the transition to tractor power will be more appropriate.

80. Tanganyika Agricultural Machinery Testing Unit (TAMTU) will engage in designing simple and inexpensive farm implements which could easily be made from available raw materials, in addition to testing imported manufactured implements. Particular emphasis will be placed on intermediate technology by TAMTU. Satisfactory TAMTU designs of farm equipment will be produced by craftsmen and local farm implements' manufacturers.

81. Implements for which designs and drawings and prototypes are already finished and which can be made locally are:—

1. Hand operated inertia pump for irrigation and general water lifting.
2. Ox-drawn spike-teeth harrow.
3. Ox-carts (Singida-type).
4. Ox-drawn groundnut lifter.
5. Hole-making devices to facilitate planting.
6. Home-made groundnut thresher.
7. Ox-drawn levelling float.
8. Solar, oven and sigiri-type dryers for processing (vegetables, fruits, etc.).

The current work programme includes the construction of ox-carts, ox-driven water pumps hand operated water pumps for irrigation, ox-drawn earth scoops, the construction and testing of ox-drawn tool bars, and the design and construction of crop dryers.

82. In the early stages of the last Plan, tractors were issued to Co-operative Marketing Unions which were inexperienced in their operation and had little or no direct involvement in farming. This mistake will not be repeated, but, where soundly based Ujamaa or co-operative production units are established, the opportunities for effectively utilizing tractorized, as well as ox-powered equipment, will be carefully evaluated for appropriate crops. In the more intensively farmed areas, the provision of mechanical services on hire to groups and individual farmers will also be developed where it is economic to do so.

83. Ubungo Farm Implements Manufacturing Company Ltd. (UFIMCO) will play two important roles in the field of agricultural mechanization. First, it will manufacture traditional implements which are currently being imported, like ox-ploughs, jembes, axes, etc. Secondly, it will manufacture specific TAMTU designed implements peculiar to Tanzania conditions.

84. As a general principle development loan funds will be restricted to the stablishment or expansion of mechanization. However, to cover loan repayment nd interest charges, and to accumulate against depreciation, the project has to be ery profitable indeed. Nevertheless, the principle of phasing out loan finance s important. If loan finance is repeated then development loan funds are tied oo long to one project and do not push out the fringe of investment opportunities.

85. An exception will be where Government chooses to subsidize scheme costs n an effort to open a new area or to establish a new activity in an area.

86. Several types of training for mechanization are required at different levels. The following are some of the requirements:

(a) Agro-mechanics are required in greater numbers for the extension staff, to give advice and instruction on the use and maintenance of all sprts of agricultural machinery. They require formal training in both agriculture and mechanics, the former available at any of the Ministry of Agriculture's Training Institute (M.A.T.I.s), and the latter from Comworks.

(b) Drivers with Co-operatives and other Government promoted schemes require training in the use of machiney and its maintenance. Courses will be organized by the Co-operative Development Division in conjuction with Landsurvey, making use of Comworks, Farmers' Training Centres and the manufacturers' agents.

(c) Local craftsmen will be trained in the construction of approved tools and machines. Maendeleo will be involved in the provision of training courses for such craftsmen in the construction and maintenance of agricultural equipment, and village industries will be established for this purpose.

(d) Farmer training is required at various levels. Courses are included in the curricula of Farmers' Training Centres in maintenance of machines, and also in the correct use of agricultural machinery including ox-ploughs and the improved farming systems that go with the use of machinery. These courses will increase as new centres are opened.

87. It is intended to concentrate extension effort on tractor mechinazation in e following nine main areas: Mwanza, Musoma, Shinyanga, Tabora, Arusha, loshi, Morogoro, Iringa and Mbeya. As well as the above, state farms wherever ey are situated will be centres for mechanization from which tractor services ight be hired and at which any tractors in the vicinity can be serviced and paired.

88. It is estimated that during 1967 a total of 8,250 ox-ploughs were sold in e country; in 1968 this went up to 9,100. At the pace at which we are developing x-drawn implements, by 1974 we might consume 15,000 ploughs a year; these will ave to be manufactured in the country. The big consumption areas are Mwanza ncluding Biharamulo, Shinyanga, Mara), Tabora, Mbeya, Iringa and Arusha. x-training centres in the following Regions will be revived and expanded: Mwanza Geita, Ukerewe), Singida (Iramba), Arusha (Mbulu), Shinyanga (Isagahe), West ake (Biharamulo, Misenyi, Mkwenda, Kalundi), Dodoma (Hombolo), Ruvuma aflah), Tanga (Tanga, Handeni). And the following F.T.C.s will be provided ith ox-drawn equipment and facilities for ox-training: Buhemba (Mara), Iringa, ingida, Nzega and Sumbawanga.

Water Development.

89. The provision of adequate water supplies to rural areas is of high iority on both economic and social grounds. Economically, water is not only critically important input into the agriculture and livestock industries, but the

provision of better domestic water supplies will both release much labour currently consumed in carrying water for other productive purposes and allow a more efficient pattern of settlement. The provision of better rural domestic water supplies is also a necessity for the achievement of a better quality of rural life, both in health and convenience, which can provide a counter-attraction to the convenience of urban living.

90. The development of water resources does, however, require heavy use of capital resources. The achievement of a fully satisfactory solution to Tanzania's water problem will take many decades. In the immediate future therefore there is a great need to ensure that the scarce resources available during the Plan period are used to maximum benefit. For this purpose the highest priority will go to low cost projects which provide benefits to maximum numbers of people, while more expensive projects bringing large benefits to relatively small numbers of people must command relatively lower priority, and must be implemented only after careful planning has demonstrated that the projects in question bring returns which justify the heavy costs involved. The maximum spread of benefits, therefore, will be achieved by an emphasis on inexpensive schemes, mobilizing self-help efforts of the local people.

91. This means that the provision of rural water supplies affecting the main body of the rural community should have priority in view of its impact on the basis of a shilling spent. The objective will be to provide water to more families in the rural areas. During the First Plan, an average of 60,000 additional families per annum were provided with water. The Second Plan envisages raising substantially the number of beneficiaries. In the provision of rural water, the following will be the guiding principles:

(i) Development of Ujamaa Villages;
(ii) Areas of acute scarcity of water;
(iii) Areas of population concentration;
(iv) Promotion of productive activities.

92. However, for the achievement of longer term objectives it is important to expand capacity to implement irrigation projects and build up experience of irrigation under local conditions. The Second Plan therefore includes provision for the immediate implementation of large scale irrigation in two areas which have already been subjected to survey, planning and design, plus allowance for an expanding programme of survey and investigation which will provide investment possibilities by the third year of the Second Plan. A balance has been struck between large scale more capital intensive projects, and smaller scale village irrigation schemes. The village schemes contribute to the objectives of mobilising the rural human resources and spreading the benefits of the development programme widely.

93. Flood control schemes present a somewhat different problem. Most flood control projects involve major schemes of river valley development involving co-ordination of rural development and power programmes and, in many cases, necessarily involving major capital expenditure both directly in water control, and also in ancillary infrastructural and productive facilities. The development of flood control and multi-purpose irrigation and hydro-power schemes is therefore to be considered in light of the strategy being developed by the National Water Resources Council. Necessarily, major joint irrigation and hydro-power schemes tend to be economically justifiable by the contributions from both expanded irrigation and hydro-power production; the timing of projects will therefore tend to be determined by the demands of the power programme, the projects being implemented as new power sources are needed.

Irrigation.

94. The need for irrigation development arises because of the uneven distribution and uncertain nature of rainfall. This has resulted in the concentration of population in only a few areas where there is abundant rainfall while vast areas of the country remain sparsely populated and undeveloped.

95. Some 65 per cent of the total cultivatable land in Tanzania falls within the 20" to 40" mean rainfall range. Dry land farming in these areas generally involves some risk and frequent droughts of varying severity can be expected.

96. Experience in the First Plan was that some of the areas earmarked for development did not turn out to be as promising as originally envisaged. This points to the critical need for more careful soil investigation in irrigation planning.

97. The criteria that will guide the future development of irrigation schemes during the Second Five Year Plan will have to be developed in the light of the lessons and experience gained during the First Five Year Plan: —

(i) Irrigation cultivation requires a highly intensive agricultural programme involving greatly increased production per acre of land. Irrigation schemes are generally heavy users of capital, so that careful project evaluation is required to ensure that the return justifies the capital invested.

(ii) Irrigation schemes will be based on selected crops that have a high potential for increased yields under irrigation. Just as certain areas of the country have a higher potential for irrigation development, so do certain crops also have a great potential for increased yields under irrigation. Also, while irrigation schemes are based on known high return crops, research will continue with other crops so that in the long term there will be well developed and diversified programmes.

(iii) Planning of the technical, economic and social aspects of all irrigation schemes will include consideration of: —

  (a) The choice between uni-purpose irrigation schemes or schemes involving hydro-power development—in this respect the National Water Resources Council will play a crucial role.

  (b) The need for a highly disciplined labour force on state irrigation farms—the human problems involved in introducing a new pattern of work, together with unfamiliar techniques, implements, crops and the strict timetable associated with irrigation are very many. Proficiency in irrigation techniques will be acquired through practical training on state irrigation farms.

  (c) The need for micro-planning—until recently the majority of irrigation schemes in Tanzania were not adequately planned, nor was adequate basic data available upon which to plan. More attention will be given to research, experimentation and micro-planning, which must go hand in hand with an expanded programme of implementation.

  (d) Manpower and management—more irrigation engineers, irrigation agronomists, and irrigation managers will be required. Good management is needed because irrigated farming is highly organized. Training of these cadres is therefore being emphasized.

  (e) The need for co-ordination: the establishment of the National Water Resources Council provides for the centralized direction of the development of national water, and river basin resources facilitate co-ordination between all affected interests, including:

(i) Irrigation of agricultural land, including state and co-operative or communal farms, and associated land settlement.

(ii) Development of hydro-electric power.

(iii) River basin and flood control.

H. *Crop Priorities.*

98. Resources available for agricultural development are scarce; efficient utilization is therefore of great importance. The nature of the resources to be mobilized is also extremely diverse: the efforts of millions of farmers, the extension service, research, credit facilities, investment programmes of the parastatal and public sectors both directly in agriculture and also in infrastructure, etc. Also, Tanzania has an unusually highly diversified agricultural output. Systematic crop priorities define criteria for the allocation of diverse scare resources to achieve a complex set of output objectives.

99. The crop policies are composed of two elements: a set of production aims and a set of Government actions designed to help achieve these aims. These two elements are inter-related but it is useful to distinguish them. The output of some crops can be rapidly increased with very little Government contribution (e.g. cashews), whereas others require support from the whole range of instruments which the Government can use to encourage agricultural expansion. Equally, a particular form of public action (e.g. research to combat Coffee Berry Disease) may be of high priority although little or no increase in production is aimed at for the crop in question.

100. Crop policies have to be flexible. Work on them proceeds continuously, as markets change and as experience in the effectiveness of different policy instruments is gained. However, a special review has been made for the Plan, and national production aims set. The development of Regional and District crop priorities will also allow the rationalization and improvement of agricultural processing and marketing facilities. It will also be possible to rationalize training with shorter, more effective specialist courses replacing some of the more general, lengthy and expensive training now offered.

101. There are many possible criteria for identifying crop priorities, particularly at a local level. Nevertheless the main considerations can be simply stated. Crop priorities must be firmly founded upon a solid knowledge of production possibilities including both natural environment and farmers' attitudes. Achievement of efficient resource use also involves an assessment of market prospects both internally and externally.

102. The market problem is likely to be particularly acute in relation to some of the major export crops. The market for sisal may well shrink, while growth in the market for Tanzania's coffee and pyethrum will be strictly limited. On the other hand, there are a number of other exports, notably cotton, cashew, flue-cured tobacco and tea, for which Tanzania can expect to market expanding outputs.

103. The production aims do not relate only to quantity but may also consist of quality improvement and efficiency objectives. For example, in the case of food grains it will be necessary to increase agricultural productivity sufficiently to provide the farmer with a growing income, at the same time as allowing for a reduction in price to the consumer. Indeed, it should be possible in the long run to increase productivity to such an extent that not only will it be possible for the consumer to enjoy more and cheaper food but it will also be possible for Tanzania to sell food staples profitably in the world market. For farmers who grow food crops primarily for their own consumpion, more efficient food production will allow greater effort to be devoted to other crops or livestock enterprises.

104. National production aims may be summarised as follows:

(i) *Crops for which accelerated or rapid increases are aimed at:*

- Meat and dairy products.
- Fish.
- Rice.
- Wheat*.
- Grape Vines.
- Seed Beans.
- Soya Means.
- Kenaf.
- Fruit and vegetables (on a selective basis).
- Tea†.
- Flue-cured tobacco†.
- Cotton.
- Oilseeds.
- Cashew nuts†.

(ii) *Crops for which present or medium growth rate is required:*

- Maize*.
- Sorghum and millet.
- Bananas.
- Other beans.
- Sugar.

(iii) *Declining or limited market:*

- Sisal‡.
- Coffee†‡.
- Pyrethrum‡.
- Fire-cured tobacco.

*Increased efficiency/lower costs and prices is an important part of the production aim.

†Quality improvement is an important part of production aim.

‡Diversification effort required.

105. There is a wide range of actions which the Government can take in support of agricultural production aims. At one end of the scale are persuasive measures such as price and tax policies, extension advice, and political exhortation. Such policies may be effective, particularly in combination, but this may be difficult to predict. At the other end is direct investment in state farms or co-ordinated credit extension—public investment programmes for small-holders. Although the range of types of measure is wide the resources available are limited and an important part of the plan is to concentrate the use of scarce resources where they will be most effective.

106. In making a judgement on the best use of resources controlled by Government there are three main considerations:

(i) the priority attached to the production aim and its scale;

(ii) the availability and likely impact of specific resources able to contribute to individual production aims;

(iii) the overall availability of different resources within Tanzania—plentiful labour and land, scarce capital, foreign exchange and management manpower. Where it is possible to achieve production aims with different combinations of resources, the method using more of the resources available locally will be preferred.

107. These considerations make it possible to isolate the major national agricultural programmes of the Plan which will concentrate on production of:

- Meat and Dairy Products.
- Fish.
- Rice.
- Wheat.

Tea.
Flue-cured tobacco.
Cotton.
Pulse foods, oil-seeds, vegetables and fruits.

This list does not include all the items listed in the "accelerated or paid output" category above. Cashews are excluded because the state of research does not permit a large input of Government resources. Similarly other crops will receive attention, notably maize, coffee and sisal, in particular ways but they will not be the object of such comprehensive or such large scale Government effort to expand output as the items included in the list above. It must also be made clear that even Regions which do not produce any of the products listed will have their own production aims which will receive support in the form, for example, of extension advice, credit and storage. Some programmes will be important locally although in limited areas, (e.g. honey and beeswax).

SPECIFIC CROPS

(i) *Cotton*

	1960–62	1963	1964	1965	1966	1967
Production (Bales '000)	190	263	293	369	434	393
Average Lint Sale Price: AR (cents/lb) ...	197	195	191	180	172	187
Export Value (Shs. million)	153	214	198	244	350	251
Per cent of All Agricultural Exports ...	14·4	16·9	14·1	19·5	21·1	16·2

The production aim for the Second Plan is 700,000 bales (in climatically favourable years) by 1973/74. It should be noted that for purposes of overall projection, an allowance is made for the uncertainty resulting from climatic factor.

108. The main cause of past growth in output has been the huge increase in the acreage under cotton in the Western Zone. This acreage increase has been the result of increase in population (both natural increase and large scale migration), in the proportion of families growing cotton and in the area cultivated by each cotton growing family. In addition there has been an increase in average yield per acre, as a result of research into new varieties resistant to disease and suited to simple standards of husbandry, of extension advice and, to a smaller extent, of a credit programme. Finally, the distribution of seed and marketing and ginning have been effectively carried out and supervised by Co-operatives, the Lint and Seed Marketing Board and Kilimo.

109. Research will continue at its present level. The release in bulk of further new varieties should be a large factor in increased output. In the Western Zone measures to encourage further migration will be taken, such as the provision of water in new areas. Large numbers of extension workers will be posted in the cotton areas, as at present, but they will be increasingly devoted to the growing credit programme for insecticides and fertilizers. Other objectives of the credit and extension programmes will be the increased use of ox cultivation (including ridging) and the abandonment of broadcast sowing in favour of row planting, since these steps increase labour productivity.

110. In the Eastern Zone production cannot be expected to rise greatly. The objective will be to concentrate production geographically near ginneries, so as to reduce marketing and processing costs, and to expand the use of insecticide, which is essential in this Zone.

111. The expanded crop will require considerable investment in storage, ginning and transport capacity (particularly by the railways). Apart from this an essential element in the cotton programme must be supply of manpower in the Co-operatives and the Lint and Seed Marketing Board.

(ii) *Coffee*

	1962	1963	1964	1965	1966	1967
Export Volume (132 lb. bags of clean coffee '000) ...	435.5	442.5	[illegible]	[illegible]	[illegible]	[illegible]
Average Export Price (Shs. bag) ...	303	310	[illegible]	[illegible]	[illegible]	[illegible]
Export Value (Shs. million)	132	137	221	[illegible]	[illegible]	[illegible]
Per cent of all agricultural exports	12.8	10.7	[illegible]	[illegible]	[illegible]	[illegible]

112. The production aim is to cut the growth rate severely compared with recent years. Even if the annual growth rate falls to about 6 per cent a year, output in 1972/3 is likely to be about 1.2 million bags, whereas our quota under the new International Coffee Agreement, which is stricter than the 1967 Agreement, will probably be no higher than about 700,000 bags. This would leave nearly 500,000 bags to be sold on non-quota markets, equal to 15 per cent or more of total legitimate non-quota sales.

113. In this situation it is necessary both to make innovations in marketing and to discourage further production increases. On the marketing side the key aim is to make long term contracts with non-quota countries.

114. On the production side increases will be actively discouraged by diversification within the major coffee areas and by pricing and marketing measures. The diversification schemes will be paid for partly from the I.C.O.'s diversification fund. The two main possibilities are dairying, particularly in Kilimanjaro and Arusha, and tea in Rungwe and Bukoba. The object of these schemes will be to divert land and labour away from coffee.

(iii) *Sisal*

	1962	1963	1964	1965	1966	1967
Production ('000 long tons)	214.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Export Price of Fibre (Shs. ton f.o.b.)	1,472	2,179	[illegible]	[illegible]	[illegible]	[illegible]
Export Value Fibre tow and flume tow (Shs. million)	315	451	[illegible]	[illegible]	[illegible]	[illegible]
Per cent of all agricultural exports	30.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

115. The aim is to increase the industry's efficiency and reduce its costs while cutting its capacity from the present potential of over 200,000 tons to a level consistent with expected export and domestic sales. The level of sales is likely to fall considerably. Precise prediction is difficult, but it seems likely that export sales, including twines will be about 160,000 tons (± 10,000 tons) by the last year of Plan period. In addition the sisal pulp project will require supplies of about 30,000 tons.

116. Maximum efforts will be put into cost reduction and the development of new profitable end uses for sisal. The scale of replanting by the Tanzania Sisal Corporation will be subject to annual review in the light of market prospects, technical progress with synthetics, cost reductions in the industry here, and replanting in other producing countries.

117. The Tanzania Sisal Corporation, the Sisal Research Station at Mlingano and Kilimo will be experimenting with and carrying out diversification schemes. Those already under way include livestock, coconut, palms, cashewnuts, and oilseeds. Other possibilities include oil palms and forestry. In a country where there is unused but fertile land the aim of diversification will not always be to find alternative use for the sisal land as much as to make use of unemployed workers. The labour force in sisal has already fallen since 1962 by over 70,000 men (more than twice the number employed today). Future unemployment problems will be manageable.

(iv) *Cashewnuts*

	1962	1963	1964	1965	1966	1967
Exports production (tons '000)	59·0	42·5	55·8	63·7	71·1	69·8
Export Price (Shs./tons f.o.b.)	792	942	1,180	1,280	1,410	1,320
Export Value (Shs. million)	46·7	40·5	65·8	82·5	100·0	92·2
Per cent of agricultural exports	4·6	3·2	4·7	6·6	6·3	5·9

118. Considerable production increase in the Plan period will result from new planting in the middle sixties. The aim will be both to improve quality and to encourage further new planting. Research will be stressed so that new varieties and new recommendations will be available for the second half of the '70s. Improved quality will help the growth of the local processing industry.

119. Past increases in production and planting have occurred without any large scale Government investment. During the Plan vigorous political and agricultural persuasion will be used to push new planting in suitable Regions where the crop is now small, such as Ruvuma, Morogoro and Tanga, as well as in the unplanted areas of Mtwara and Coast Regions.

(v) *Tea*

	1962	1963	1964	1965	1966	1967
Production Total (lb. million)	9·5	11·1	10·6	12·5	15·0	15·8
Export Price (Shs./lb.)	3·5	3·52	3·13	3·20	3·23	3·23
Export Value (Shs. million)	32	31	31	29	45	43
Per cent of all agricultural exports ...	3·1	2·4	2·2	2·4	2·9	2·8

120. Production is likely to increase by about 50 per cent during the Second Plan, almost entirely from existing acreage. Estates at present produce 95 per cent of total output but are not likely to do much new planning, as the private sector is deterred by the recent sharp fall in profitability, while the public sector (N.A.F.C.O. and T.S.C.) have less than 10 per cent of total acreage.

121. The aim during the Second Plan will be to plant over 20,000 acres of small-holder tea in Tukuyu, Bukoba, Lupembe and the Usambaras (compared with 4,500 acres in the First Plan) and to create an organization capable of handling an additional 50,000 new acres by the end of 1978/9.

122. As in the past farmers participating in the schemes will be provided with planting material and fertilizers on credit from the N.D.C.A., with close supervision from the extension workers, and with roads to the factory. The basic organization of the scheme will be shifted, however, from an individual to a co-operative farming system. A new element will be a public agency (the Tea Authority) to arrange the building, finance and management of factories. Up to now small-holders have delivered their tea to private estate factories. The new Tea Authority will handle the establishment of factories and factory companies as well as the regulatory and research functions of the old Tea Board and the overall supervision of the small-holder programme.

123. This ambitious programme involves a rapid build up of new acreage from an annual planting of 1,500 acres in 1969/70 to 7,500 acres in 1973/4. The main requirements for its success are finance, rising from Shs. 6 million in 1969/70 to over Shs. 15 million in 1973/4, effective and disciplined arrangements at scheme level to ensure a smooth and rapid flow of green leaf to the factories, and staff in very large numbers. For field development and production the staff/farmer ratio required is 1:100 at Assistant Field Officer level. To help meet the staff needs, particularly for field work, a tea training school will be established at Amani in 1969/70.

124. In addition to plans based on intensive supervision, experiments will be made with less closely controlled development. This will be tried in an area which is isolated from the intensive schemes but where suitable land is plentiful, and where farmers are interested in tea, provided the normal conditions for N.D.C.A. lending are met.

(vi) *Tobacco*

	1962	1963	1964	1965	1966	1967
A. *Flue-Cured:*						
Production (lb. million)	2·5	3·1	3·9	8·6	7·9	10·1
Price paid to Growers (Shs./lb.) ...	–	2·52	2·40	2·26	2·09	2·37
Gross Marketed Value (Internal) (Shs. million)	–	8·3	9·3	19·5	16·5	14·0
B. *Fire-Cured:*						
Production (lb. million)	1·3	1·9	0·7	2·7	3·4	7·0
Price paid to Growers (Shs./lb.) ...	–	–	0·59	0·63	0·67	0·83

125. The expansion of small-holder production of flue-cured tobacco will be one of the major programmes of the Plan. The growth of the market for fire-cured tobacco means that production of that type can only rise modestly.

126. The output objective over the Plan period is to achieve a rate of growth of 25 per cent per annum reaching 35 million lb. by the end of the Plan period. This is an ambitious production programme requiring considerable supervision and infrastructural development to ensure the quality necessary to command a fast expanding share of the world market. Of the 11 million lb. produced in 1968, 4 million lb. was supplied by large scale farmers; the rest came from small-holders. Future expansion is to be concentrated in the small-holder sector, where growth will take place by N.D.C.A. credit and by public investment in water supplies, roads, and storage capacity. As with tea, there will be a shift to co-operative production organization as a basis for future expansion.

127. The finance needed for farmers credit will rise in gross terms to Shs. 30 million in 1971/2. Close supervision is needed because the growing, curing and grading of this crop are all difficult and laborious and need to be done properly if the credit provided, reaching a peak of Shs. 1,800/- per man in a farmer's second year, is not to be wasted and the farmer is to receive a fair return for his effect.

(vii) *Pyrethrum*

	1962	1963	1964	1965	1966	1967
Production of Pyrethrum Flowers (Lb. million)	[illegible]	5·0	5·1	8·1	9·2	11·9
Exported Quantities Extract (Tons) ...	33	68	92	140	197	196
Unit Export Price ('000 Shs./Ton) ...	153·7	150·6	148·1	148·2	146·3	149·7
Export Value (Shs. million)	5·1	10·2	13·6	20·8	28·8	29·2

128. The production aim is to avoid producing more than can be marketed on a profitable basis. This will be difficult as between 1960/62 and 1967 production has grown by an average of over 20 per cent a year. The two lines of action will be discouragement of output increases and search for new markets. In the short run the second is unlikely to have any large effect, though energetic efforts are already being made. One factor which will tend to discourage output is the price fall of about 20 per cent. However, pyrethrum will remain the most profitable opportunity open to most small-holders in pyrethrum areas, particularly in the South where output has risen fastest. Diversification opportunities are being explored, as are ways of tightening up the existing quota control system. It is in the interests of farmers that such controls should work, since otherwise prices may fall further.

(viii) *Oilseeds*

	Groundnuts		Sesame		Sunflower		Castor	
	Quantity (Tons)	Value (Shs. million)	Quantity (Tons)	Value (Shs. million)	Quantity (Tons)	Value (Shs. million)	Quantity (Tons)	Value (Shs. million)
1962	6,780	7·8	8,470	10·2	11,860	7·0	13,510	12·0
1963	12,180	15·2	9,340	12·6	6,810	4·1	26,860	20·1
1964	11,480	15·2	7,070	9·4	10,360	6·0	13,860	12·4
1965	6,570	12·0	9,670	12·4	6,410	5·6	9,340	7·6
1966	4,800	6·7	7,260	12·1	5,470	5·2	15,850	12·8
1967	5,740	–	6,760	–	4,140	–	13,910	–

129. The aim is to increase production in contrast to the recent past when output has been stagnant or falling for groundnuts, castor, simsim and sunflower, and when soya has hardly been grown at all. Many of the actual and potential producing areas of these crops have a low farm income per head and will not be benefitting from other major programmes of the Second Plan. An increase in oilseed output is the best agricultural opportunity open to these areas.

130. In the past oilseeds have not been given a high priority by public policy. They were not mentioned in the crop husbandry section of the last Plan (except for groundnuts). In the new Plan period expansion will be encouraged by all available means. Although growers' prices for castor and simsim have been rising, there is still need to raise income and yields per acre. In the case of groundnuts, edible seed will be provided in the areas where the lower value crushing nuts have traditionally been grown.

(ix) *Rice*

131. The aim is to transform Tanzania from being a net importer of rice on a modest scale into an exporter during the Plan period. Internally subsistence consumption is likely to rise by at least 3 per cent a year and marketed demand by about 7 per cent a year. Externally the best prices are likely to be obtained from neighbouring countries. Exports to markets outside Africa would be at rather lower prices. Increased efficiency both on the farm and in milling and marketing will be needed so that internal prices can be lowered by the end of the Plan. At present world prices the internal price reduction needed to make exports profitable will be smaller for rice than for maize or wheat.

132. As with wheat, paddy is produced in many different places and ways. There is great scope for improved methods and increased output from small-holders growing paddy with flood irrigation, e.g. Rufiji and Kilombero Valleys. Kilimo's irrigation projects at Mbarali and Mombo are also promising. A state farm is already established on the Ruvu and others are being established during the Second Plan. The location of milling capacity and the pricing system is being rationalized, so as to reduce unnecessary transport costs and to encourage output increases in the most economic areas.

(x) *Wheat*

	1962	1963	1964	1965	1966	1967
Production ('000 tons)	17·3	18·5	20·7	30·1	32·8	29·2
Imports ('000 tons)	35·1	19·2	25·0	36·1	21·6	32·1

133. Until recently almost wheat production was in Kilimanjaro and Arusha Regions, mostly by large commercial farmers, although small-holders also produce a significant quantity and there is one wheat producing settlement scheme. Sumba-

wanga District is now being brought into wheat production with state farms, a prison farm and small-holder block schemes. Small quantities of wheat are also being produced by peasants in Mbeya, Iringa and Njombe.

134. The aim is to achieve self-sufficiency in soft wheat (about 85 per cent of total needs) preferably during the Second Plan. This could be achieved in good weather years if the acreage under wheat rises by about 15 per cent a year cumulative. An average increase in acreage of 15–20,000 acres a year is therefore needed.

135. Export prices would be about Shs. 40/- or less in the world market which is well below the price at which N.A.P.B. currently buys from the local producer. Therefore, an important element in long-term development must be the reduction of production costs and efficient location of production, storage and processing facilities in relation to the potential market.

(xi) *Sugar*

Marketed Production: tons	
1964	60,470
1965	66,325
1966	69,898
1967	70,618

136. The production aim is self-sufficiency plus a small additional capacity. Production of 110,000 tons in 1974, compared with 70,600 tons in 1967 will allow for a 6 per cent growth of mainland demand, which is rather faster than the actual recent rate, and still leave over 5,000 tons for disposal within East Africa or under the Commonwealth Sugar Agreement, if East Africa as a whole is by then a net exporter. These figures exclude cane grown for subsistence and jaggery.

(xii) *Maize*

137. Maize is by far the most important food grain crop in Tanzania. It is a major objective of agricultural policy to ensure that local production expands to meet the needs of a growing population and to allow for increasing levels of per capita consumption. It is also intended to maintain sufficient stocks to tide the country over the bad harvest years and avoid the situation of the early sixties, when there were periods of high imports.

138. Most maize produced is either consumed by the farmer, sold locally or by other means by-passes the official marketing channels. The N.A.P.B. therefore handles a relatively small proportion of the total crops—probably between 1/7 and 1/10—mainly for the urban market and the export surplus.

139. Export prices are considerably below the cost to the N.A.P.B. of exporting maize. A very considerable loss is made on exports—at existing prices the loss is over 300/- on each ton exported. This carries considerable financial risks if large surpluses are generated. Although N.A.P.B. handles a small proportion of the total maize output, the whole surplus is purchased by them; therefore, their purchases fluctuate much more widely than underlying fluctuations in production.

140. The heavy loss made on exports partly results from a high price to producers (by international standards) and partly from heavy transport and handling costs. In the long-term, increases in farm productivity and improvement in transport and handling costs can be achieved through agronomic improvements and greater regional specialization in commercial maize production. Quite dramatic increases in yield should be possible, allowing for reduction in growers'

prices to be combined with increasing growers' incomes. During the Plan efforts will aslo be made to develop additional domestic uses of maize, both in the livestock industry and in processed forms. The Tanzania Sisal Corporation is undertaking an experimental development of low cost maize production as part of a piggery project.

1. *The Livestock Industry.*

General Development Strategy.

141. Tanzania has natural resources which should enable it to increase livestock production, principally meat and dairy products. It has extensive areas of grasslands which already carry a large livestock population and it has vast areas of miombo woodland with relatively high rainfall, which when cleared would carry a very large livestock population.

142. Productivity of beef from cattle herds is low at present because of low take-off rates and low average carcass weights at slaughter. The typical off-take rate of 8 per cent to 10 per cent annually is extremely low by comparison with the target of 20 per cent which N.A.F.C.O. expects to attain on its cattle ranches by efficient management and stringent disease control measures. Although a similar level is not feasible for livestock herds owned by numerous small-holders, a substantial increase in present off-take rates should be attainable through an improvement in marketing facilities and a more rational price structure. Average carcass weight of cattle slaughtered throughout the country is probably of the order of 250 lbs., a low figure attributable largely to poor nutrition resulting from serious overgrazing of pasture. With better systems of land use, cattle management and disease control, greater weights could be obtained from indigenuous cattle and these could be further increased with the use of improved strains of cattle.

143. With present off-take rates and slaughter weights, annual production of carcass beef is estimated at approximately 220 million lbs. Measures being instituted to overcome bottlenecks to increased productivity should produce an annual growth rate of 5 per cent in beef production. Prospects for increased production lie in increasing productivity from existing cattle numbers rather than from endeavouring to increase cattle numbers. Indeed, in the areas of high cattle population further increases in numbers would result in more serious overgrazing, pasture deterioration and soil erosion.

144. Measures to increase offtake rates from the areas of high cattle population, will be combined with measures to achieve stratification in production of beef, with certain areas concentrating on breeding of cattle for sale as immatures to be finished for slaughter in more favourable areas. A large proportion of the area of high cattle population is not suitable for finishing cattle because of inadequate rainfall and short growing season of pastures and would be best used for breeding of immatures. Some of the sub-coastal areas, at present virtually unstocked, have relatively high annual rainfall and will be developed as areas for finishing cattle. This development, in addition to increasing overall beef production will give a better balance of beef production throughout the country as the sub-coastal regions are at present areas of very low beef production. Steps will be taken to increase the availability of stock in parts of the country which are now seriously understocked and where there is a demand for cattle, notably in the southern part of the country.

145. There is in Tanzania a limited market for high quality meat at a high price and this is currently met largely by imports. However, there are areas in

Tanzania with high rainfall and temperate climate which are quite suitable for producing high quality beef—or lamb—on pastures. These will be developed to supply the growing demand for these products.

146. The 44 million goats and 2·8 million sheep in Tanzania make a fairly large contribution to meat supply, with annual off-take rates equivalent to approximately 30 per cent of total numbers. Their major contribution is in supply of meat for local markets where facilities for cold storage are not available. Goats and sheep are suitable for some areas too dry for cattle or in areas where disease is a problem with cattle. To stimulate increased production with goats and sheep, steps are being taken to breed and distribute improved meat producing strains of both species.

147. As dairy imports are the largest food item in the country's total import bill and as there are areas of the country suitable for much greater dairy production, development of dairy is accorded very high priority for the Second Plan. The areas most suitable for dairy production are areas of high rainfall and high altitude, with fertile soils where either exotic or high grade dairy cattle can be kept. These are usually areas of high population density and relatively high income, derived from cash crops. Kilimanjaro is one such area where dairy production on a fairly intensive scale is being practised by a large number of small-holders, to supply milk for local consumption either to other farmers or for sale in Moshi. There are a number of other similar areas where dairying on the same system could be adopted.

148. To supply milk to the major towns, it will be most efficient to organize production through a limited number of medium to large sized dairy state farms, located, if practicable, close to the towns. This is also an area in which there are possibilities of producers' co-operatives; ujamaa dairying groups could provide some of the economies of medium scale dairy farming which will never be available to the individual small-holder.

149. In developing production of pork and poultry meat, the two prime considerations are organization of a marketing information service to reduce dangers of periodic gluts and shortages and reduction in the prices of food stuffs to producers. On this latter point steps have already been taken by the National Agricultural Products Board to supply food to farmers at prices below their normal selling price.

Land Use and Management.

150. To achieve higher production it will be necessary to evolve systems in which grazing can be controlled to prevent overstocking. The Range Act, 1964, is the most appropriate tool to achieve this. Under this Act local Range Commissions appointed by the Minister for Agriculture, Food and Co-operatives, stimulate the formation of Ranching Associations, which, in return for accepting internal communal discipline in management of their range area and cattle—including restriction of stock numbers—may receive capital aid from the Government to develop their land resources and also rights of occupancy over the land. In the First Five Year Plan, funds were allocated for range development of six districts to which Commissions were appointed. Agreement has been reached between the Government and the United Nations Development Programme for a five year livestock development project, which aims to improve on the use of the Act as a means of development of livestock production in Masailand, Sukumaland and the Central Regions and to provide in-service training in range management for Tanzania staff.

Disease Control.

151. A large measure of control of the major diseases of livestock has already been achieved in Tanzania and this has been to a large degree, responsible for the building up of livestock population.

152. One major remaining disease problem for livestock is undoubtedly the group of diseases transmitted by cattle ticks, particularly East Coast Fever.

153. Kilimo will implement a project for installation of 500 cattle dips and 500 spray races to be used in a programme for regular treatment of cattle to control tick infestation and tick borne diseases. For the present, regular dipping is the only effective means of controlling these diseases. The programme of dip construction and operation will be co-ordinated with other projects and programmes for livestock development. Priority in implementing the programme will be accorded to areas where other projects for increasing livestock production are being instituted, e.g. in areas where the U.N.D.P. Livestock Development Project will be operating, in areas where programmes for dairy development are being undertaken and in new areas to be developed for fattening of purchased immature cattle. Within such areas priority will be given according to the extent of the participation by the people themselves in collective action to make more effective use of resources of land and water for increased production and in accordance with the development of marketing outlets.

154. At present, dips are operated by district councils which charge fees for dipping and meet the costs involved in operating the dips. Existing dips and new ones to be built will be taken over and operated by Kilimo. This will provide for better planning of the programme on a national basis. Under the present situation, the provision of dipping facilities is influenced to a large degree by the financial resources available to the district council rather than by needs of the livestock industry.

Livestock Marketing.

155. At present there is no organization for livestock marketing on a national basis. Livestock markets are owned and operated by district councils and many of them are in a serious state of disrepair. The practice of collecting a variety of rates, taxes and other dues from stock owners when they bring livestock to markets and the lack of supervision of marketing, which facilitates the formation of buying rings which depress prices, deter livestock owners from using markets for sale of cattle. An increasing proportion of cattle are being sold outside the markets and this results in loss of revenue to district councils and increased difficulty in control of diseases which are spread by movement of livestock.

156. The Government will re-assume responsibility for organization and control of livestock marketing, to be exercised through a Livestock Marketing Section of Kilimo which will take over and operate all livestock markets. It will licence all traders who buy at livestock markets and take action to prevent formation of buying rings to depress prices. Floor prices for different classes of livestock will be established on the basis of prices at terminal markets and costs of transportation, and when necessary the marketing section will buy at these prices. It will also foster the development of marketing channels in areas where these are deficient. The organization of marketing will be closely co-ordinated with plans for development of new areas for finishing off immature stock purchased from breeding areas, by arranging sales in the latter areas and, if necessary by purchase of immatures for delivery to the newly developed areas.

Meat Processing Plants.

157. The existing major plant, operated by Tanganyika Packers Ltd. near Dar es Salaam, is distant from the major cattle producing areas and this leads to high costs of transport of cattle to the plant. Construction of another plant in the cattle producing regions will be undertaken during the Plan period, which will require a minimum throughput of about 50,000 head per year. N.A.F.C.O. proposes erecting a small abattoir with cold storage facilities at Mbeya, initially to supply local meat requirements but with provision for expansion to neighbouring markets. Additional developments will be pursued in the identification and development of small-scale abattoirs and cold storage facilities.

158. To improve the throughput of cattle through the Dar es Salaam meat-packing plant, the Sisal Corporation will, in the context of its diversification programme, develop capacity for fattening stock purchased from the region west of Dodoma. Efforts will then be concentrated on ensuring that the areas used for fattening are maintained disease free, thus reducing the problems the plant now faces in ensuring supply.

J. *Fisheries Development.*

159. Tanzania's most important existing fishery is Lake Victoria which provides about 40 per cent of the total fish caught. About 20 per cent comes from the sea, and the remainder from Lakes Tanganyika, Nyasa, Rukwa and Kitangiri and a variety of minor sources. Commercial fishing of prawns and lobsters is carried out from Dar es Salaam. Imports of dried salted and smoked fish at Shs. 3·5 million per annum consisting mostly of shark and kingfish, brought in by dhow from the Middle East, are in excess of exports, valued at Shs. 3·3 million most of which are dagaa sent to Zambia.

160. Consumption of fish, the bulk of which is consumed dried or smoked, remains low by international standards at around 15 lbs. per head per year. In coastal areas a slow change towards consumption of fresh fish is anticipated: with a cheap supply of ice it should be only fractionally more expensive to keep fish fresh rather than smoked or dried. In lake areas the bulk of production will continue to be dried.

161. Improvements in traditional processing methods are being developed by Kilimo at Nyegezi near Mwanza, which will lead to less wastage of fish. But these methods in themselves will not provide sufficient fish to meet anticipated demand. Increase in fish landed will remain a priority.

162. Fish are a highly perishable product. Therefore the development of the industry requires the carefully co-ordinated expansion of production, processing and marketing facilities. Marketing will not be improved until landings are concentrated at a limited number of places where many buyers can concentrate.

163. Potential for fishing is very great. A conservative estimate for the off-shore continental-shelf fisheries is that ten times the present landings could be taken without destroying the source of supply. On the Lake Victoria a UNDP project is assessing the potential: the preliminary conclusion is that there is a large deep water fishery untapped.

164. The fisheries service is a relatively new department of government. As Tanzanians currently in training enter the service the basic capacity of the government to influence fishery expansion will expand at a fast rate; this will be the case towards the end of the Second Plan.

165. The following projects are at an advanced stage of preparation: —

(a) Lake Victoria Research Project;
(b) Lake Tanganyika Research Project;
(c) Food Protein Conceptrate Factory, Mwanza.
(d) Development of Fisheries Training and Marine Research.

The Lake Victoria and Lake Tanganyika projects are regional projects to evaluate the resources of the respective fisheries; all countries bordering the Lakes are involved. The Fisheries Training and Marine Research project provides training for fisheries' officers training at the University College and its out-station at Kunduchi.

166. The following new development projects are included in the Plan: —

Ujamaa Village Fishing Units (Marine).
Ujamaa Village Fishing Units (Inland).
Port Terminal Facilities (Marine).
Port Terminal Facilities (Lake Victoria).
Fish Processing and Port Terminal Facilities (Lake Tanganyika).

Marine village Fishing Units are proposed for the following villages: —

Phase I—Moa (Tanga Region), Bagamoyo.
Phase II—Pangani (Tanga Region), Mafia, Kilwa, Lindi.
Phase III—To be selected during the Plan period.

The aim would be to provide selected villages with modern boats and gear, and ancilliary storage facilities including a cold store. The entire operation would be supervised and managed in the initial stages by fisheries personnel but will eventually be turned over to a producer's co-operative in the village. Application of Ujamaa will enable the fishermen to reap the benefits of modern techniques, and larger scale operation. As the project must be regarded as experimental, funds will take the form of loan capital to be recovered by the officer in charge on a pay-as-you-earn basis. For each village an investment of Shs. 550,000/- should give a net income excluding depreciation of Shs. 180,000/-.

167. Inland Fishing Villages have not yet been selected. Fishing port facilities are proposed for Tanga, Dar es Salaam and Mikindani on the coast, and Mwanza, Bukoba and Musoma on Lake Victoria. For each place the first phase (Shs. 1,400,000/-) will provide a landing quay, a wholesale fish market, an ice making plant and storage facilities. A second phase will provide facilities needed for a larger scale industry—boat-building yard, engine maintenance, and fish processing facilities, etc.

168. The Mwanza Town Council is completing plans for the building of a fish receiving station at Mwanza. Total cost of the station will be Shs. 600,000/-.

169. The plant at Kigoma will provide for hot air drying of dagaa, plus storage and distribution facilities.

K. *Forestry.*

Present Position.

170. It is estimated that there are 160,000 square miles of forests in Tanzania. This includes about 3,500 square miles of Tropical High Forest, 600 square miles of mangroves, and the remainder is woodland and grassland. Out of this area, 50,000 square miles have been set aside as Forest Reserve. At present 60,000 acres of coniferous plantations and 5,000 acres of the fine hardwood plantations have been established. Of the indigenous forests, 23,000 acres have been brought under intensive management.

171. Over the last 3 years official records show that 5 million cubic feet annually have been extracted from the forest. Of this total 2·2 million cubic feet came from forest reserves and 2·8 million cubic feet came from unreserved lands: 2·9 million cubic feet is from indigenous forest. Forests on unreserved land are rapidly disappearing following upon agricultural expansion. This means that in the long run, the country's requirement must be from the forest reserve.

172. The production from the indigenous forests can be doubled during the next five years by:

(a) utilizing many more species of trees;
(b) investing in additional hardwood logging and sawmilling facilities; and
(c) investing in effective exploitation control.

Investment of this kind will increase revenue collection and increase export earnings.

173. Afforestation programmes started in 1958 at the beginning of the first Forestry Development Plan are now coming into production. By the end of the Second Plan period the annual yield from these plantations will have risen from 3·0 m. cubic feet to 9·0 m. cubic feet. Currently, only a small percentage of this is being utilized. Emphasis is therefore to be placed upon efficient and full utilization of this large and valuable resource.

174. The present consumption of industrial wood (excluding fuelwood and poles) has been increasing at a rate of 10 per cent per annum over the past four years, and has now reached an absolute figure of 8 million cubic feet. The range varies from 6 per cent growth for sawn wood to 16 per cent growth for wood pulp products. By 1974, the estimated annual requirement of industrial wood will be 14 m. cu. ft. Adequate measures must be taken to meet this increased requirement. This will have to be done in three ways:

(a) by developing forest industries to process the available raw material;
(b) by expanding planting and tending programmes to meet the predicted requirements of the nation; and
(c) by pursuing a vigorous applied research programme.

175. The prospects for a healthy export industry are also good. Tanzania is very favourably placed geographically in relation to the timber deficit regions of the world and because the climate favours the rapid growth of trees it has the potential to capture a significant share of their world markets.

176. The development of forest resources has been in the hands of the private sector. Direct Government and parastatal participation in forestry development is considered to be the only effective way to bring about integrated production and utilization. It follows therefore that state participation in the marketing of all major forest produce is essential.

177. Applied research in the forest crop and the end products from the crop is needed to safeguard the forest investment. Forestry research in the past has been inadequate, thus hindering development programmes.

178. The planning and siting of forest industries (an essential prerequisite for planned development of forest industries) is dependent upon a very accurate and comprehensive knowledge of the productive capacity, both present and potential, of the forest estate. An intensive survey and inventory programme to provide this information is included in the Plan.

179. Water is a necessity for life in both the rural and urban areas. Conservation and development of water supplies is vital. By and large the sources of the major rivers and streams have been protected by forest reservation. These catch-

ment forests must be safeguarded against destruction by harmful agencies and destructive human activities. Remaining catchment areas will be brought under protection.

180. Tanzania is the world's largest exporter of beeswax. The export trade is currently worth Shs. 5 million. In addition, honey is exported to the value of Shs. 1 million. The industry is based almost entirely on forest beekeeping using traditional production methods. Research has shown that production of high quality honey and beeswax can be significantly increased by the adoption of more modern techniques in beekeeping. A programme is to be instituted to encourage forest beekeepers to adopt these techniques. Ujamaa development of the commercial potential of the beekeeping industry will be promoted drawing on the experience gained in Tabora.

181. The present consumption of fuelwood is 450 million cu. ft. per annum. This consumption is expected to rise in the short term but it is expected that as the national economy develops, there will be a shift to other forms of fuel and the problem of fuelwood supplies will tend to be more and more localized. There are therefore no plans at the national level for centralized fuelwood production but provision must be made at the village level. Provision will be made for fuelwood schemes for specialized purposes such as tobacco curing.

182. At the village level, because of the scatter of population, it is considered that the best approach to meet local requirements is farm wood lots and in some instances, communal planting. This will be achieved through local tree nurseries for the provision of planting material to the farmer, coupled with extension work. Maximum efforts will be made to involve community groups, such as school and ujamaa village groups in both the development of local tree nurseries and in campaigns of tree planting.

183. There is lack of public awareness of the value of forestry to the national economy and therefore a need to educate the public in forestry. Valuable timber species are continually being misused much to the detriment of the economy. This is mainly a question of ignorance on the part of the user who must therefore be educated in rational utilization of the various timbers. There is also a need to rationalize the existing forest industries where there is a lot of wastage due to inadequate knowledge of efficient methods of harvesting, processing and marketing timbers. A public education programme will therefore be mounted during the Second Plan.

184. During the 1964/69 development plan emphasis was placed on afforestation schemes and conservation of natural water supplies. In the Second Plan it is proposed to dynamize the development of the entire forestry sector by integrating the development of the resource and its utilization.

Forest Industries.

185. A start has been made in the public sector development of wood-using industries. One sawmill is already under construction and will be in production before the onset of this Plan. This softwood sawmill is the first of six such mills proposed for the Plan period. The second sawmill financed by the National Development Corporation is also currently under construction. Estimates for the remaining four sawmills have been prepared and included in this Plan. In addition to these softwood sawmills, plans and estimates have been prepared for four hardwood sawmills, one of which will be financed by the National Development Corporation.

186. In order to supply all the foregoing sawmills, independent logging units have been included in the Plan.

187. To market the produce from all the above-mentioned industries as well as to rationalize the existing timber trade, central marketing units have also been included in this Plan.

188. The long term objective is the establishment of a corporate body solely respnosible for the planning, development and operation of all these forest industries. The planned forest industries activities can therefore be seen as a first major step in this direction.

Afforestation and Development of the Indigenous Forest.

189. To meet the future demand for lumber it is imperative that the afforestation programmes and the development of the indigenous forest be continued during this Plan period. It is also necessary that existing plantations and regeneration areas be tended and that necessary infrastructure required for the industrial utilization of these crops be developed.

190. In this Plan three projects are included. They are softwood afforestation, hardwood afforestation and the development of selected indigeneous forest. The softwood afforestation programme covers the establishment of 45,000 acres of new plantations, the maintenance of this plus the previous planted area of 60,000 arces, and the provision of roads, bridges, housing, and water supplies required for the exploitation of the crop. There is also a hardwood afforestation project and a development of indigeneous forest project. Wherever possible use will be made of the National Service in implementing this programme. No provision has been made in this Plan for the establishment of pulpwood plantations, but it is intended that if the results of a feasibility study planned for early 1969 are good, pulpwood afforestation programme will be inserted at a later date.

L. *Crop Protection.*

191. The objective of crop protection during the Plan will be the progressive reduction of crop destruction by insects, pests, vermin and diseases in the farm and in the store. Crop losses by these causes can be of an alarming magnitude. It is estimated that for cereal crops alone, losses in the field can be as high as 25 per cent of the potential yield and as much as 30 per cent of the harvested crop in storage.

192. While virtually all cash crops, e.g. cotton, coffee, sisal, tea, cashew, etc., are adequately taken care of in protection against such losses, food crops are not adequately cared for, particularly during storage at the individual homesteads, or during marketing.

193. During the period of the Plan, greater emphasis will be laid on the application of the known methods of control and on research to determine new and cheaper methods of control. The areas of emphasis in this service will be centred on: —

(a) *Field Protection:*

Crop losses in the field are mostly due to infestations by insect pests and diseases and by destruction by vermin and birds. The breeding of resistant crop varieties, the use of insecticides and fungicides and the destruction of vermin and birds by farmers will be emphasized and encouraged. Vermin Control Teams and Bird Control Services will be strengthened to support the initiative of the farmers.

(b) *Home Protection:*

Crop losses at home are due to infestation by insect pests and, to a lesser extent, diseases and rodents. In order to minimise such losses, emphasis will be placed on better storage facilities and the use of insecticides.

(c) *Storage:*

Co-operative unions and Marketing Boards will continue to expand and improve storage facilities which will have a substantial impact on the crop losses in their godowns. A programme for the provision of adequate storage capacity from the primary co-operative society level upwards will continue, including building of godowns in strategic places.

M. *Game.*

194. The role of game in the promotion of tourism has been outlined in the chapter on Tourism. Game services, however, serve other purposes, such as the control of big game for the protection of crops, particularly in areas surrounding the game reserves, and game cropping, which falls under two categories: the purely commercial cropping schemes now being conducted near Lake Rukwa and in Loliondo (Masai District) for the provision of cheap protein food to the inhabitants and, secondly, smaller-scale game cropping schemes now being organised with the support of the local people with the object of providing them with meat for their own consumption and to interest them in the advantages of game conservation for the good of the community. Both these objectives will be promoted by the Game Division during the Plan Period.

CHAPTER IV

INDUSTRY

A. *Introduction.*

In the long-run, economic development requires the creation of an industrial base. Although the industrial sector is now so small that, in the coming Plan, industrial expansion can provide employment and income for but a small proportion of the Tanzanian people, if a high level of development is to be achieved over the coming decades, the foundations of future structural change must be laid now.

2. Structural change for sustained growth is required which:

(a) expands the range of products manufactured and lessens dependence on foreign sources of supply, both for essential consumers goods and for capital goods;

(b) increases the manufactured element in exports;

(c) shifts trade dependence away from overseas towards internal and African markets and sources of supply; and

(d) develops managerial and technical expertise in the operation of industry and the introduction of modern technology.

3. These structural changes will be necessary to ensure high rates of growth. To emphasize a dichotomy between rural and industrial development is misleading. Industrial growth is itself a stimulus to rural development and the growth of internal trade. Growth of industrial incomes generates expansion in the domestic market for high value foodstuffs. Equally important, it generates employment opportunities outside agriculture. As rural development proceeds and productivity in agriculture rises, the eventual effect is to reduce the need for workers in traditional, low productivity, low income rural occupations.

4. Although these points are particularly significant for the long-term perspective, they are far from irrelevant to current policy. Successful industrialization is achieved through a successful choice of the appropriate sequence of steps: if the foundations are not correctly laid in the coming decade, then industrialization will seem even more difficult in 1980 than it does today.

If the long-term nature of the problem is recognized, certain implications follow. The criteria applied to industrialization must be adjusted to achieve long-term results, as well as to provide purely short-term benefits. Further, individual projects must be considered in light of the overall strategy for industrial development.

B. *Industrial Progress: 1962-69.*

5. At independence, Tanzania was virtually without industry. In the years 1960-62 the manufacturing sector accounted for only 3·[illegible] per cent of total gross domestic product. In 1962, only twenty-two thousand people were employed in manufacturing, a very small proportion of the total work force. Most manufactured goods were imported; even by comparison with her East African neighbours, Tanzania's industry was woefully under-developed.

Since that time much progress has been made; growth of manufacturing has been at higher rates than any other sector. The official gross domestic product estimates indicate industrial growth of 10 per cent per annum from 1960/62–67, and this is almost certainly an under-estimate due to inadequacies of statistical coverage. Nevertheless, even after allowing for possible incompleteness of statistical coverage, by the completion of the First Five Year Plan industrial output will account for no more than 8 per cent of gross domestic product.

In terms of employment, the number of jobs in manufacturing had risen to 33,000 by 1967; although this total remains small, it is important to note that a considerable proportionate increase was achieved at a time when total recorded employment stagnated.

The potential importance of the growth in manufacturing is particularly great in relation to the balance of payments. Development demands heavy imports of capital goods and transport equipment. As the pace of development accelerates, demand for such goods rises faster than the overall growth of the economy and the growth in primary commodity export earnings. If the economy remains dependent on imports as a source of supply for all manufactured goods, scarcity of foreign exchange will place a serious brake on the speed of development.

7. As a result of the industrial programme of the First Plan, by the end of the Plan the gross capital stock in industry will lie in the range Shs. 1,200—1,400 million. Although the data are incomplete, it seems that slightly more than half of the gross industrial capital stock will have resulted from the investment programmes of the First Plan.

8. A further development of crucial potential importance to the industrial sector was the creation of new arrangements for the East African Common Market.

9. The East African Community Treaty ensured the continued economic co-operation of three partners on a basis of mutual advantage and placed the Common Market on a firmer footing, which is likely to provide the basis of accelerated industrial growth and may well provide the nucleus of an expanded economic community in East and Central Africa. The existence of an East African wide market provides industrial possibilities for all three countries which would not exist on a national basis. The transfer tax provisions provide a tool to achieve eventually a more satisfactory location of industrial capacity. The creation of the East African Development Bank is intended to provide a significant source of additional finance for East African industrial development and is also an instrument to redress the industrial balance between the partner states.

10. Although the Common Market offers potential industrial benefits for all its members, those benefits will be gained in proportion to the success of each of the member states in creating a high level of industrial efficiency. Tanzanian industry must be able to compete against Kenyan and Ugandan competitors.

11. One characteristic of the neglect of industrial development in the past was the absence of any experience in implementing industrial projects; this led to a heavy dependence in the First Plan on the encouragement of foreign investment as a means to industrialize. Although the mobilization of foreign know-how is an inevitable element in the industrial programme, it would have been tragic if the cost had been the creation of an industrial structure which was completely controlled from abroad. This danger was averted first

by the creation and development of publicly controlled Tanzania industrial investment institutions—notably through the creation of the National Development Corporation. With the extension of public control following the Arusha Declaration there was an expansion of the role of the Corporation and the creation of additional public investment institutions. The National Development Corporation, the Workers' Development Corporation, the Sisal Corporation, the National Milling Corporation and the Co-operative Movement all contribute to the expansion of manufacturing and processing industries. The nationalization of commercial banking added flexibility to the financing arrangements available for industrial development.

12. Industrial strategy in the First Plan period involved three principles:

(a) the additional processing of local primary products (this was implemented to a limited degree—e.g., in relation to sisal, coffee and cashewnuts);

(b) import substitution of mass-produced consumer goods of technical characteristics which allow their manufacture at an acceptable level of efficiency on the basis of the East African market (the major instance in this case has been textiles); and

(c) the manufacture of building materials, which would be in heavy demand as a result of ambitious investment programmes and which could be produced economically locally because of the high transport cost element (the most notable example under this head was cement production).

13. Starting from a very low level, a high rate of growth in industrial output was achieved. With the increasing utilization of capacity created in the First Plan, industrial output can be expected to continue to expand at high rates well into the Second Plan period.

Table 1

PRODUCTION OF SELECTED INDUSTRIES

Industry	Unit	1963	1964	1965	1966	1967	1968
Cement	tons	—	—	—	49,320	144,603	153,883
Beer brewing	'000 galls.	1,962	2,249	2,673	4,139	5,102	5,413
Textiles	'000 sq. yds.	6,225	8,930	12,126	17,121	18,277	34,519
Cigarettes	millions	1,144	1,535	1,869	2,049	2,044	2,137
Paints	gallons	95,357	96,981	162,513	221,020	274,623	317,948
Plywood	'000 sq. ft.	2,004	6,573	7,794	10,247	8,808	10,658
Sisal twine	tons	—	658	5,778	10,138	14,887	16,454
Saw milling	'000 cu. ft.	3,676	4,675	5,029	5,026	4,585	5,029
Wheat flour	tons	28,378	29,818	38,433	39,714	41,159	42,238
Pyrethrum extract ...	tons	99	107	174	200	287	187

Source—Central Statistical Bureau.

C. *Long-term Strategy.*

14. Experience elsewhere suggests that possibilities offered by the First Plan strategy are likely to become increasingly limited during the second half of the 1970s. The underlying problem may be stated as follows. When the process of import substitution for simple consumer goods manufacture is completed, the domestic growth in demand for these goods is limited by the rate of growth of the overall economy. Many of the consumer goods industries created at the first stage produce only a small part of the final product with domestic materials, using a high proportion of imported materials and creating a domestic market for new types of imports. Export possibilities are limited, because other

developing countries have established similar industries; also, it is these industries which are most highly protected in the industrialized countries, where they are typically the older, more stagnant activities. Therefore, the process of simple consumer and construction goods import substitution having been completed, capital goods and intermediate goods used as inputs by the new industries will be limited in supply because they must be purchased abroad and therefore, depend upon export potential and aid possibilities. Thus, if a high growth rate is to be sustained the strategy of industrial planning should be gradually changed.

15. The development of basic intermediate and capital goods industries should receive an increasing priority. Against this certain counter-arguments are sometimes offered:

(a) the size of the national market in Tanzania, along with most other African countries is too small;

(b) the level of technology required is high and not yet available in the country; and

(c) capital intensity of these industries is high which is a drawback in a country where capital is scarce.

16. Regarding (a), while there is some merit in the argument of size of market, it must also be recognized that over the long-term the available market will grow. According to conservative estimates, by the turn of the century the population of the three East African countries alone will increase to at least 60,000,000 and with increases in per capita incomes total output will rise to Shs. 70,000 million (at today's prices). The addition of new members to the East African Community and the gradual end of the Balkanization of Africa will create an even larger market.

Regarding (b), limits placed on industrial development by the scarcity of technical know-how existed in most industrialized countries when they began the process of industrialization. The reason industrial countries have the techniques is that they acquired them in the process of industrialization. The early stages of industrialization must aim to increase technological know-how as much as to expand industrial output as such. This task is not easy but will require systematic effort, especially in technical and science education, over a number of plan periods.

17. Regarding (c), although the production of capital goods is itself capital intensive, the expansion of such activities will increase the possibility of new investment in subsequent years, thus contributing to a fundamental solution to the problem of capital scarcity.

18. A central concern of the Second Plan period will be the fashioning of a longer term industrial strategy through the identification and preparation of projects in new industries meeting the more complex requirements of the next stage of industrialization. For this purpose a long-term industrial plan is to be prepared during the first half of the Second Plan period which will provide the framework for detailed preparation of the Third Plan.

19. For the long-term, therefore, steps towards the development of a capital goods industry must form an important element in industrial strategy.

20. The creation of more complex and larger industries will require greater attention to the nature of inter-industry connections which will acquire more systematic long-term planning than has so far been necessary.

21. It will also be necessary to sell a greater proportion of output in markets outside Tanzania, particularly in the context of a pattern of industrial specialization within Africa.

22. The development of markets outside Tanzania for domestic manufactures has not in the past had high priority because of the availability of the local market, still largely satisfied by imports. In general, the same factors which lead to the consideration of more complex industries for development also suggest the need for increasing attention to export promotion of industrial products.

23. In simple quantitative terms the achievement of Tanzania's long-term development goals will require the contribution of industry to gross domestic product to increase seven-fold in the period from 1968/69 to 1985, more than doubling the ratio of industrial output to gross domestic product. Of the total output required by 1985, long-term projections suggest that about 40 per cent will be generated by the activities of industries already developed by the end of the First Plan. Another 20 per cent will be sought in industrial production for export through increased processing of local raw materials; the long-term objective is that by 1985 between a sixth and a seventh of the total value of overseas exports will be generated in manufacturing. The remaining 40 per cent will be the required output for new industries producing for the East African market: the creation of new industries of that size will require the extension of the range of industries discussed above.

24. If long-term industrial strategy requires increasing attention to the problems of capital and intermediate goods production and export promotion, it must also be recognized that in the immediate future such a policy will have little impact.

25. Over the coming decade, foreign exchange will become increasingly scarce and will be increasingly allocated to the capital needs of the development programme and the import of raw materials.

26. Large-scale consumer goods manufacture will only have created capacity to meet part of the range of consumers' needs.

27. In order to enrich the living standards of the mass of the population, it will be necessary to find ways of bridging the gap between the desired standards of consumption for the masses and the limited range of domestic industrialization. A contribution to bridging this gap will be the development of labour intensive small-scale industry and crafts.

28. However, it will also be necessary to adopt an increasingly austere policy towards the import of consumer goods particularly the more expensive kind.

29. The development of the clothing industry, furniture manufacture, manufacture and repair of household utensils, small-scale production of building materials, fashioning and repairs of simple agricultural equipment and, in some instances, small-scale production of raw materials for new industries, will together play an important role in meeting crucial needs with the minimum use of scarce resources.

TABLE 2
SUMMARY: INDUSTRIAL PROJECT LIST FOR THE SECOND FIVE-YEAR PLAN

No. of Division	Industry	No. of Projects	Preparation Stage			Investment Mil. Shs.	Gross Output Mil. Shs.	Export		Employment	Average Investment Project	Investment Output Ratio	Investment per employee '000 Shs.
			I	II	III			%	Mil. Shs.	Total			
31	Manufacturing of Food Beverages and Tobacco	97	47	36	14	436	498	35	175	11,650	4·5	0·9	38
32	Textile Wearing Apparel and Leather Industries	51	26	12	13	274	270	50	140	6,170	5·4	1·0	44
33	Manufacturing of Wood, Wood Products incl. Furniture ...	67	49	14	4	147	247	60	144	6,160	2·2	0·6	24
34	Paper and Paper Products Manufacturing	12	8	1	3	355	197	60	122	2,300	29·6	1·8	155
35	Chemicals incl. Coal, Petroleum and Plastics	48	24	11	13	349	290	30	84	3,640	7·3	1·2	96
36	Non Metallic Mineral Products except Product of Petroleum and Coal	18	12	2	4	112	104	20	24	1,320	6·2	1·1	85
37	Basic Metal Industries	3	2	–	1	92	68	70	47	910	30·0	1·4	101
38	Fabricated Metal Products, Machinery and Equipment ...	77	58	5	14	159	215	15	34	5,050	2·1	0·7	32
39	Other Manufacturing Industries	12	9	–	3	10	16	50	8	420	0·8	0·6	24
	TOTAL ...	*385	235	81	69	1,934	1,905	40	778	37,620	5·0	1·0	51

*Out of 385 projects 78 are expansions.

D. *Second Plan Programme.*

(i) *Summary.*

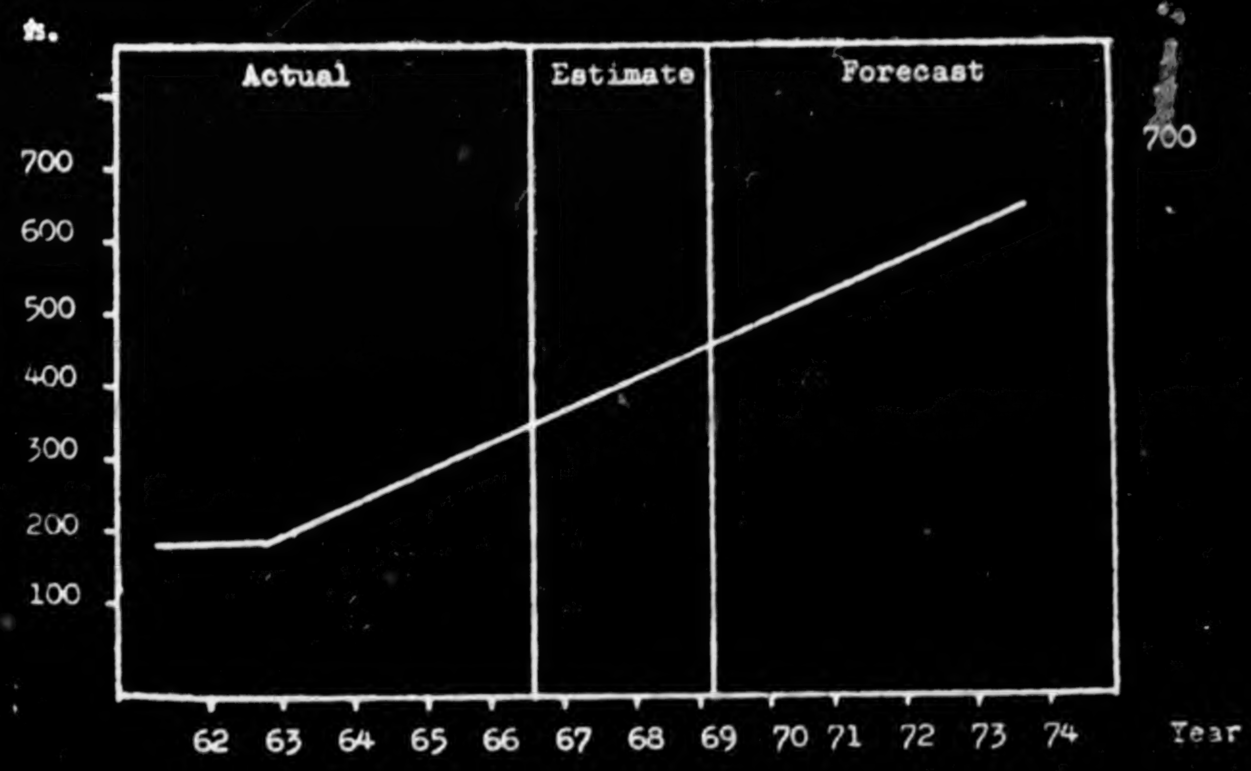
30. The detailed five year industrial programme is based upon a project list of industrial investment possibilities consisting of some 385 projects—including projected expansions in existing factories. These projects are in differing stages of preparation. If they all prove feasible and were all implemented, total investment of Shs. 1,900 million and additional gross output in industry of Shs. 1,900 million would result. This would require an additional domestic market of about Shs. 1,100 million, the remaining gross output going for export. This programme would result in 38,000 additional jobs.

31. This list represents the pool of potential investment opportunities which have been identified, either at the pre-feasibility or feasibility study stage. Some of these projects may be rejected or postponed following further feasibility study, and others may be added. However, achievement of overall Plan goals will not require implementation of the full list—growth in the domestic market resulting from growth in other sectors, the availability of financial resources and the implementation capacity available, all suggest somewhat lower targets. The overall Plan requirements will be met if roughly seventy per cent of the investment possibilities identified at this stage are utilized by projects which are implemented in the Plan period. This leaves a considerable margin within which to operate.

32. Thus it is estimated that the total amount of capital available for investment in the expansion of industrial capacity will be of the order of Shs. 1,300 million; compared to investment opportunities of Shs. 1,900 million. In addition, the Plan aims to double exports to partner states in the East African Community over the Plan.

Diagram I

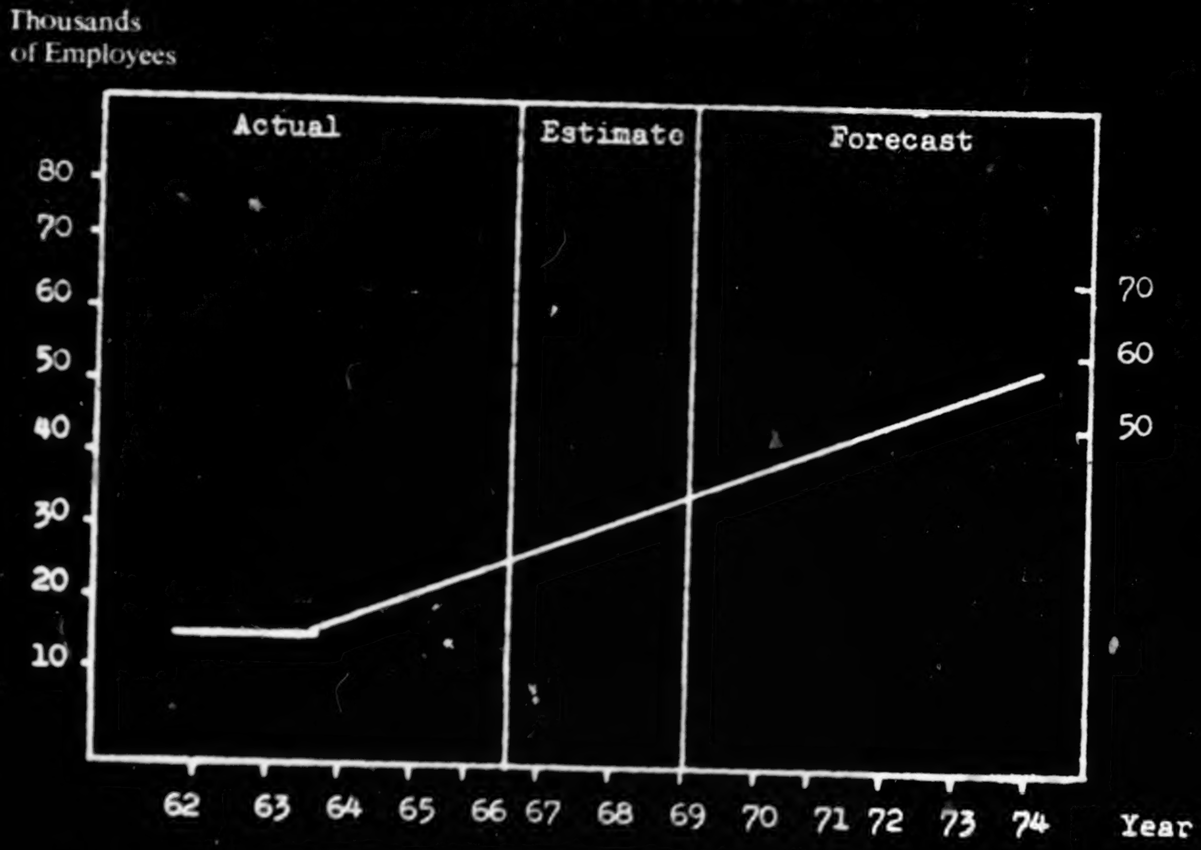
MANUFACTURING GROSS DOMESTIC AT CURRENT FACTOR COST 1962-1974



33. It is estimated that the local consumption of Tanzanian produced industrial products will increase by Shs. 800 million over the five years of the Plan; the increase in production for local market from the identified projects would be Shs. 1,100 million. So the Plan will require implementation of only about 70 per cent of the potential projects to meet overall investment targets and output needs.

34. The final choice and timing of projects will be decided during the Plan period. The balance of available projects is indicated in the summary table. As there are six very large projects the timing of which will greatly influence the size of particular sub-sectors, diagram 3 separates out the effects of these projects and indicates the balance of the remaining medium sized projects which make up the basic programme.

EMPLOYMENT IN INDUSTRY 1962-1974



35. For the purpose of identifying the overall task for the manufacturing sector, minimum sectoral targets have been set as follows:—

Total projects: 380 80 expansions
300 new projects
Total Investment: Shs. 1.300 mill.
Resulting in:

Gross Output: Total Shs. 1,400 mill.
of which: exports: Shs. 350 mill.
local: Shs. 1,050 mill.
Employment: 30—31 thousand.

36. The output and employment increases represent the impact of these projects at full capacity operation; the total impact will therefore not be felt until well into the Third Plan period. The macro-economic projections have been

adjusted accordingly. In the case of employment it should be noted that the actual net increase in industrial employment will be somewhat below this figure, even at full capacity, because of increasing labour productivity in already existing industries. These trends are difficult to estimate, but for purposes of making employment estimates it has been assumed that labour productivity increase will be 3 per cent per annum. The conclusion is that industrial employment can be expected to rise by some 20,000 during the Plan period and will exceed 60,000 in 1975.

37. This minimum programme represents an ambitious yet realistic target for industrial performance. As implementation and planning capacity of the government and the parastatal sector expands it may prove possible to increase the programme, but if this happens it is likely to be in the form of projects to be implemented in the last two years of the Plan, which will not have any great impact on output and employment by the end of the Plan.

38. Projects identified in Plan formulation have been allocated between sectors. In keeping with the Arusha Declaration, the bulk of investment is in the parastatal sector, providing further evidence of the importance of this sector for the achievement of Second Plan targets. However, although the bulk of investment will be implemented by parastatals, there are a large number of small projects which are appropriate for workers' and co-operative organizations and also for private investors. Although there are a large number of such possibilities, they are small in size and therefore account for a minor portion of the total programme: —

Table 3

SECTORAL ALLOCATION OF PROJECTS

PERCENTAGE DISTRIBUTION

Sector	No. of Projects	Invest-ment	Output	Employ-ment
Parastatal	43	84	79	77
Workers' and Co-operative	21	4	5	7
Private	36	12	16	16
	100	100	100	100

39. The industrial programme has also been designed to reflect the economic decentralization policy of the government, by shifting industrial development away from Dar es Salaam and concentrating effort on the creation of other urban growth points. In making this allocation it became evident that Tanga and Arusha will have a considerable industrial programme even without great efforts of re-allocation. Achieving the growth objectives for the other urban centres identified in Chapter XII will require, however, continued attention throughout the Plan.

40. Because of the existing industries in Dar es Salaam and the overriding advantages of the city as a site for some projects, Dar es Salaam continues to command a substantial share of industrial investment; naturally, this is particularly true of those projects consisting of extensions of existing facilities.

41. The balance which results in the planned programme is as follows:—

Table 4
GEOGRAPHICAL DISTRIBUTION
(PERCENTAGE OF GRAND TOTAL)

	No. of Projects	Investment	Output	Employment
Dar es Salaam and Area	34	19	26	24
Urban Development Areas	57	76	70	71
Other Towns	9	5	4	5

(ii) *Programmes for Branches.*

1. *Food, Beverage and Tobacco.*

42. This branch is already the most developed part of the Tanzanian manufacturing sector. The basis for its growth lies both in the ambitious programme of agricultural expansion incorporated in the Plan and in the rapidly growing urban market. Project possibilities in this branch are thus generated by three factors:

(a) fast-growing demand for certain beverages and foodstuffs, particularly because of the fast expansion in urban markets;

(b) import substitution possibilities, because of the existing dependence upon imports for some foodstuffs, notably dairy products;

(c) export possibilities for certain processed foodstuffs, such as canned meats.

Over one-quarter of the industrial projects fall in this branch.

43. Many of the projects in this branch are small-scale, in a number of cases involving further development of existing activities.

44. Projects aimed at meeting local demands are proposed in grain milling, sugar refining, bakery products, confectionery, brewing, tobacco processing, animal and poultry slaughter and packing, fishing processing, animal food concentrates and dairying.

45. Projects emphasizing the export market are proposed in meat canning and cashewnut processing.

46. Oil milling and fruit and vegetable preserves will be developed both for the domestic and export markets.

47. The development of fish processing, fruit and vegetable preserves, poultry packing and dairying are heavily dependent on new break-throughs being achieved in agriculture and fishing. Likewise, expansion in meat canning is contingent upon the sucess of the policies outlined in Chapter III in generating a faster growth in availability of animals for slaughter.

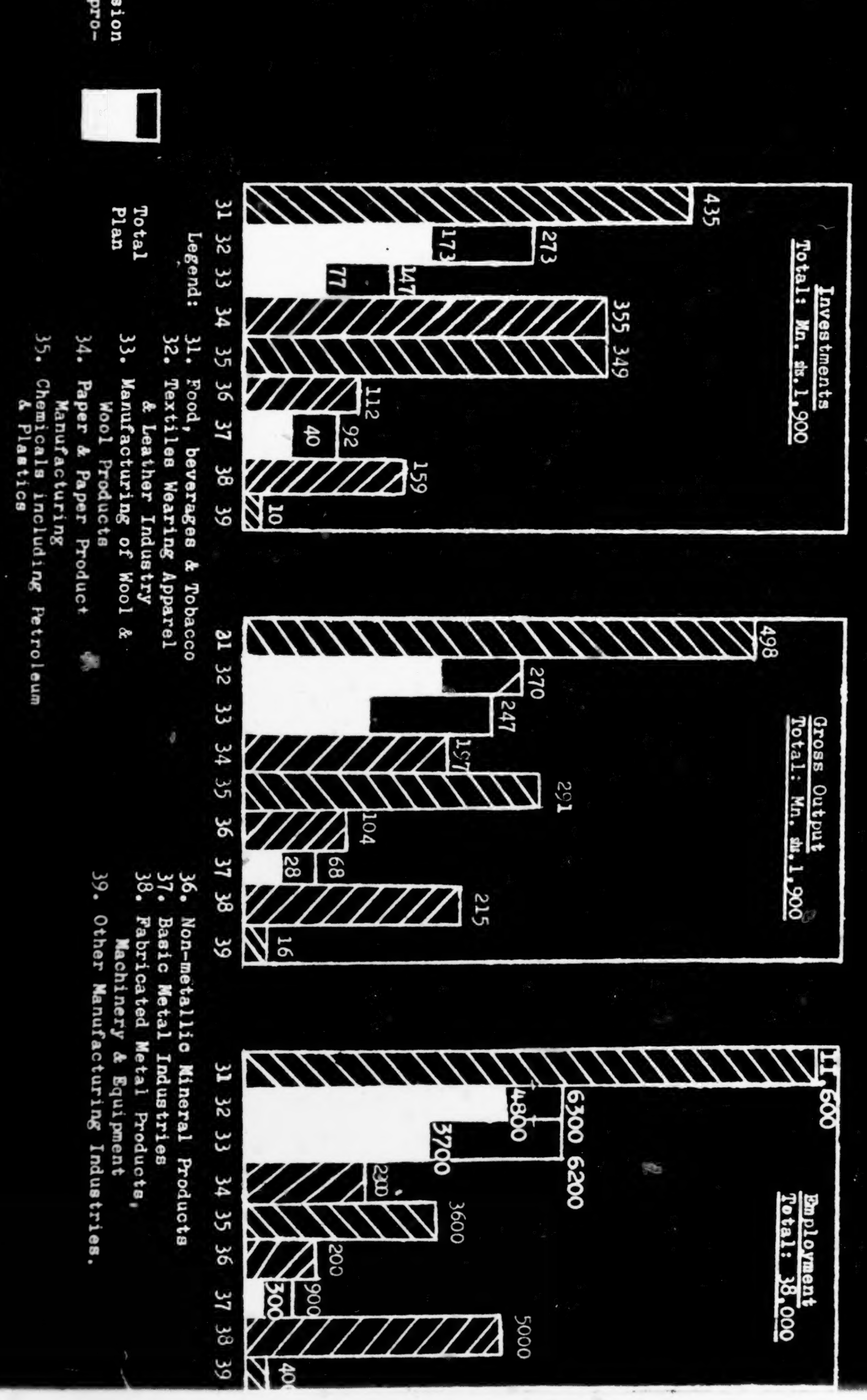
48. In the case of beer brewing and grain milling the basic limitation on expansion will be the rate of growth of the domestic market.

49. The sugar expansion will consist of two expansions and one new project, and is a straightforward effort to satisfy the growing domestic market.

50. The limitation on the expansion of cashewnut processing is the improvement in the efficiency of the industry and deductions in costs, so that an increasing proportion of the crop can be efficiently handled.

The following diagram gives a comparison of the development of the different branches:

Diagram 3: INVESTMENTS, OUTPUT AND EMPLOYMENT FOR INDUSTRIAL INVESTMENT POSSIBILITIES



51. Over the longer-term the growth of this branch will probably be of the order of 7–10 per cent per annum depending on agricultural performance.

2. *Textiles, Weaving Apparel and Leather Industry.*

52. Basic expansion in the capacity of this branch has taken place at such a high rate during the First Plan that the major task during the coming five years is to ensure the effective utilization of that capacity. Investments will be mainly to fill in remaining gaps and to bring existing plants up to their full planned capacity operation. The relative importance of investment in this branch will therefore be less than during the First Plan.

53. The new developments in basic spinning, weaving and finishing part of the industry will be in more sophisticated lines, notably blended fabrics, decorative fabrics, knitted and stretch goods, etc.

54. Small-scale, labour intensive developments are planned in clothing manufacture.

55. There are a number of developments proposed in sisal and kenaf bags and in twine, rope and cordage from sisal and coir.

56. Small-scale developments are also planned in tannery shoes and leather goods. This is a very under-developed sub-branch at the moment; Tanzania exports large quantities of unprocessed hides and skins. During the coming Plan a more vigorous effort will be made in this area which, if successful could form the basis of a large, labour intensive industry to supply the domestic, export and tourist trade markets.

57. Although the textile industry cannot be the basis for high rates of industrial growth over long periods, because of the limitations of the size of the domestic market, there are considerable opportunities for small-scale labour intensive developments on a decentralized basis to fill the gaps not appropriately served by the large-scale project of the type implemented in the First Plan.

58. As a result of the utilization of considerable capacity created in the last three years but not yet brought into production in the last year of the First Plan, it will be possible to double textile production over the Plan. For the longer-term, unless export markets can be developed, growth in the range of 6–8 per cent per annum can be expected.

3.&4. *Wood, Wood Products, including Furniture, Pulp and Paper Products.*

59. Tanzania has both a fast growing domestic market and a considerable potential international comparative advantage in this sector. Many of the possible developments are labour intensive. The local endowment of raw materials is considerable, and the programme of forestry development set out in Chapter III will contribute further to such possibilities. Thus, there is much unexploited potential in this branch, both in the export trade, where the local fine woods and the large undeveloped forest reserves provide considerable possibilities and also domestically, where the range of products available to the consumer does not reflect the tremendous possibilities to produce pleasing, inexpensive artifacts from local timbers.

60. Many of the possibilities here are particularly appropriate for small-scale developments by individual craftsmen and co-operatives. However, there is also a potential for large scale developments, such as fibre board and plywood manu-

facture, and the development of specialist medium scale activities, as with timber railway sleepers, prefabricated buildings and specialized hardwood uses (e.g. parquet flooring). A key factor, therefore, will be success with which the considerable knowledge about local timbers which has been accumulated by the Forest Division can now be mobilized to generate viable projects involving small-scale local initiatives as well as large-scale parastatal projects.

61. Energetic efforts to develop sawmill, board, plywood, veneer and parquetry capacity will be made during the Plan to increase the economic returns from the valuable timber resources, as outlined in the forestry section of Chapter III.

62. In the furniture trade there is the possibility of a large number of small factories; it is one line which could well be developed co-operatively. Central help will be required to improve styling and know-how. The same can be said for paper products, such as writing blocks, exercise books, diaries, labels, calendars, etc.

63. Paper and pulp production presents different problems, as a highly capital intensive industry with substantial economies of scale. One major project which has been under study and design for some time, for example, is the large-scale project for producing paper pulp from sisal. As this is both expensive (the largest project in the programme) and involves new technology, its implementation requires the most careful preparation. In making the macro-economic projections, therefore, the output and employment impact of developments in this sub-branch have been assumed to come in the Third Plan period and do not influence the 1973/74 targets.

64. The wood, wood products and pulp branch, over the long-term, have possibilities of very high rates of growth. The basic constraint will be the speed with which technical and managerial know-how can be developed. The export potential is considerable, the domestic market is growing rapidly and the range of domestic uses could be greatly extended through the systematic application of available knowledge (e.g. in improved house building). The basis for that long-term development will be created in the Second Plan.

5. *Chemicals*.

65. The development of chemicals consists of a number of small and medium size projects, both new factories and extensions, producing a diverse range of products, such as soaps, detergents, ink and paints, insecticides, pharmaceuticals, various plastic goods; tyre retreading, etc., and two large-scale plants. There are a number of possible medium-scale projects handling by-products from large projects, notably from the proposed fertilizer and sisal pulp plants.

66. The two large projects are the fertilizer plant and the tyre factory. Work has already begun on the fertilizer plant, while the tyre factory should be implemented in the first half of the Plan. Towards the end of the Plan, when work on the expansion of the oil refinery becomes necessary, capacity for the production of asphalt will also be created.

67. Apart from the oil refinery, the existing chemicals industry produces on a small and medium scale, concentrating on simple products. As the economy grows, the possibilities for development of the chemicals industry will grow swiftly both in size and complexity. Many chemical products are intermediate goods, of use as inputs in other industries, as well as in agriculture. Basic chemicals

production is characterized in many lines by the heavy use of capital and the existence of economies of scale. Over the longer-term, although the possibility exists that this industry can grow much faster than overall economic and industrial growth, it will require systematic long-term planning to co-ordinate the growth of inter-related subsectors and to phase growth appropriately, to avoid highly expensive over-capacity at some stage.

68. Over the Plan the output of chemical products, other than oil refining, will more than double. The growth of oil refinery products will be insignificant during the Plan as growth in domestic demand will be compensated for by a decline in exports; although investment in additional refining capacity is likely to be underway by the end of the Plan period, the output effects will not be felt until the following plan period.

6. *Non-metallic Mineral Products.*

69. The major investment in this branch is in the expansion in capacity of the cement industry, to meet the fast growing demand resulting from planned growth in construction activity. However, there are also a number of projects to increase the range of building materials produced domestically; it is intended to move towards basic designs in the house-building field which are substantially based on the use of local materials.

70. There is still room for import substitution in this sector. Over the longer-run, when the rate of investment activity has been raised as a proportion of gross domestic product to near the maximum level which can be sustained over the long-run, the market for building materials will grow at roughly the same rate as the growth in the overall economy. During the Second Plan output is expected to double; subsequently, growth may be expected to fall below 10 per cent per annum.

7. *Basic Metal Industries.*

71. Over the longer-term, the maintenance of the momentum in industrial expansion will require the development of basic metals. An important project in the Plan therefore consists of the investigations of the possibilities of creating an iron and steel industry. As the immediate task consists of the further investigation of the available iron and coal deposits and as the metallurgical problems of working the iron ore have been investigated mainly at the initiative of the Mineral Resources Division, this project has been presented in the Mining chapter.

72. Apart from the investigation of this major possibility there are some possibilities for medium scale metal-working projects using imported materials, including the possibility of a small steel rolling mill.

8. *Fabricated Metal Products, Machinery and Equipment.*

73. During the Plan the farm implements factory, built in the First Plan, will come into full production. There are also a large number of small and medium scale possibilities in fabricating simple metal products for the building trade, assembly and parts manufacture of simple standard machinery, of mechanical and electrical household appliances and of transport equipment. Necessarily such projects must start in a simple way, using imported parts and materials; essentially during the coming Plan this range of industries will be at the pilot stage, during which know-how can be acquired.

74. The assembly of machinery and transport equipment from imported parts cannot be expected to generate a large domestic value added initially, but must be seen as part of phased development, which will be followed by the progressive extension of the manufacture of the simpler parts locally, steadily increasing the local content in the final value.

75. A range of products related to the development of electric power is envisaged. These include assembly of electric appliances, materials for electricity distribution, production of electric motors, etc.

76. As this branch contains a number of possibilities which are quite new, and many which can operate on a small and medium scale, there are a large number of project possibilities, but relatively few are in an advanced stage of preparation.

77. The possibility of small and medium scale projects depends on the availability of technical and design advice and quality control from the centre. Creation of centres of technical advice in both mechanical and electrical engineering will therefore be an important element in the Second Plan industrial programme.

E. *Project Evaluation.*

78. At the outset of the First Plan, the role of industrial planning was limited. A substantial part of the industrial sector was private, while even the public sector was involved in joint projects, where implementation was dependent on the initiative of private interests, in most cases foreign. Naturally private enterprises aim at the maximum short-term profit; this, in itself, dictated limits to the range of possible ventures.

79. With the Arusha Declaration, this situation was transformed. Commitment to self-reliance and the extension of public control over all the major areas of industrial activity placed responsibility for industrial development squarely within the public sector. Now Tanzania is faced with a situation similar to that from which a number of socialist countries have successfully industrialized through programmes of planned expansion.

80. Placing responsibility in the public sector was a necessary first step towards the creation of successful industrial development. By itself, however, public control will not be sufficient to ensure satisfactory industrial development. Indeed, if an appropriate strategy is not formulated and effective steps not taken to implement it, the public sector would be left to respond passively to proposals emanating from foreign investors. Nor is short-term profitability an adequate criterion for the choice of projects; its uncritical application is likely to result in decisions similar to those which would have been made by the private sector. Moreover, choosing projects solely for their profitability begs crucial issues, as profitability is itself determined by public policies, in relation to tariffs for example. Short-term profit must be weighed against the achievement of long-term objectives, where these can be clearly specified.

81. In order to develop rational and effective decision making in relation to industrial project selection, systematic criteria will be laid down during the Second Plan which will be applicable to all parastatal projects and will be used for guiding public policy outside the parastatal sector.

82. For this purpose the impact of the project on overall development will be evaluated under four heads:

(1) foreign exchange effect;
(2) real net contribution to domestic product;
(3) budgetary impact; and
(4) social impact.

(1) *Foreign Exchange Impact.*

83. The impact of projects on the balance of payments situation will become increasingly important, because of the need to increase the availability of foreign exchange for imports of investment and other essential goods.

84. Most industrial projects have heavy foreign exchange costs in their initial stages—notably imported machinery—and also in their recurrent operations, using imported fuel, raw materials and management, or using local raw materials which could otherwise generate overseas earnings. On the other hand, the output of the project may either substitute for some import or generate exports.

85. The balance of these effects must be positive or the net effect of the project will be a deterioration of the external financial situation.

86. It may, at first sight, seem surprising that a project which is commercially viable could be a net foreign exchange loser. However, this can happen because of protection; foreign exchange costs of a product may be greater than the previous import cost, leaving a margin for profit because the protected manufacturer receives a much higher price than the previous importer.

(2) *Real Net Contribution.*

87. Some of the resources used by a project are less costly to the society than is suggested by their price—the employment of additional unskilled labour, for example, is less costly to society in diverting scarce resources to a project than is suggested by actual wages. Also, the output of a project may bring benefits, in making other projects possible for example, over the market value of the output. Calculations will be made in terms of these real costs and returns.

(3) *Budgetary Impact.*

8. Industrialization through substitution of domestic for imported manufactures results in loss of import duties, usually not fully matched by direct and indirect taxes on the domestic output.

(4) *Social Considerations.*

89. Particular social and long-term economic considerations will be taken into account in the selection of industries, industrial location, and industrial promotion. One critical consideration is the attainment of greater regional balance as discussed in Chapter XII. The development of appropriate policies, incentives and guidelines to ensure that the actual industrial establishment pattern is consistent with social and long-term economic criteria is an itegral part of the on-going industrial planning process.

F. *Protection.*

90. It is sometimes necessary to afford fiscal and/or administrative protection to new industries. Protection is not viewed as a permanent subsidy to the inefficient producer, but as an initial incentive to help overcome the obstacles to industrial development posed by entrenched external competitors and limited initial internal markets and sources of inputs.

91. Protection must in general be reduced over time to encourage the achievement of greater efficiency on the part of Tanzanian industries. The development of efficiency is essential to allow reduction of prices to domestic producers and

the development of industrial exports to neighbouring African economies and abroad.

92. Protective measures include customs tariff, transfer tax, government purchasing policy, and administrative action such as import licensing. A related incentive is the refund of duties paid on imports used in the production of industrial exports; for example the refund of the duty paid on cloth used in the manufacture of exported shirts.

93. Both administrative and fiscal protection should be viewed as interim measures to assist in the development of industries and not as a permanent prop to a high cost, inefficient industrial sector. Liberalization is not intended to bring about a sustained increase in imports at the expense of local producers. It is to throw more of the responsibility of maintaining and increasing their market share on the producers, and to encourage them to defend their position by increasing their all round efficiency.

94. Where tariffs on imports of manufactures are the rule throughout the world, the viability of exports may depend on achieving higher than normal returns in the home market, in order to be able to price exports at a level where they can slip under other countries' tariff barriers. Moreover, export markets are often uncertain and may fluctuate markedly in line with world economic conditions. The need for a protected home base in these circumstances is especially important for the more capital intensive industries. Thus there is a limit to how far tariffs and other protective measures can be reduced from the initial level.

G. *Regional Development.*

95. Industrial location policy will be formulated and applied in the context of achieving more balanced regional development and an expanding number of growth centres in different parts of Tanzania. A number of instruments will be used jointly to reduce the costs of industrial production in new centres, expand their market opportunities, and encourage greater intra-regional trade in manufactured goods.

96. Cost reduction in several regional centres can be furthered by improved transportation and by the decentralization of construction material production. The new cement plant and sawmills should significantly lower building costs in certain parts of Tanzania. In addition, expanded technical education and training programmes, geared to serve the entire country, can markedly reduce the lack of skilled manpower and of service facilities which now hamper industrial development in some areas.

97. Market development for manufacturers located away from Dar es Salaam will also be assisted by transport development. For example the improvement of coastal shipping and the completion of the highway to Zambia will significantly broaden marketing possibilities for manufacturers in Mtwara and Mbeya respectively. The establishment of a nationwide wholesale network by the State Trading Corporation will significantly ease the barriers to and lower the costs of distribution of Tanzanian products both absolutely and relative to those of imports.

98. In the long run it is the building up of a number of significant market areas each with an agricultural and industrial production base which will provide the strongest dynamic for continued decentralized development. The growth of manufacturing in Mwanza and in Moshi–Arusha over the past few years illustrates this point. Initially, however, both general policies to assist in market development and cost reduction and, in some cases, selective incentives to particular plants will also be required.

H. *Ownership.*

99. As a result of the Arusha Declaration the main responsibility for industrialization lies with the public sector. The creation of an organizational structure of sufficient capacity to carry out this task to the full is a central purpose of the Second Plan. Given the dominant role to be played by the parastatal sector, scope is still left for initiatives from co-operative and workers organizations, municipalities and from the private sector to take up a range of small and medium scale possibilities.

100. The basic policies of socialism and self-reliance alter the balance of responsibility for industrial development but a substantial range of opportunities for mutually beneficial private sector involvement remains. Joint enterprises between Tanzania public sector majority share-holders and foreign private minority investors can be of particular value in facilitating the transfer of technology and the training of Tanzanian personnel.

101. Considerable benefits will accrue in the long-run from the expansion of public ownership, because:—

(a) it will be possible to create a genuine Tanzanian industrial know-how faster than under conditions of unrestricted private investment;

(b) it will be possible to pursue a more effective industrial strategy than that possible under private enterprise;

(c) the profits made in industry will be re-invested in Tanzania.

102. With the expansion of the public sector and the governmental machinery, the institutional arrangements relating to industrial development have become quite complex. There are a number of ministries with responsibility in this area; Economic Affairs and Development Planning, Commerce and Industries, the Treasury, and in the case of agricultural processing and wood-working, Agriculture, Food and Co-operatives. Moreover, there are now a number of parastatal organizations—the National Development Corporation, the National Agricultural and Food Corporation, the T.D.F.L., the Co-operative Movement, the National Milling Corporation, TIPER, the Tanzania Sisal Corporation, N.U.T.A., W.D.C. and Local Governments.

Sectoral Allocation of New Industries.

103. As industry develops, an increasing number of judgments must be made regarding the ownership structure of new enterprises. To a degree, judgment must be pragmatic, if only because of the difficulty of defining meaningful definitions which will fit all cases (thus a chemicals factory could range from a large petro-chemicals concern, which would certainly be in the public sector, through to a small soap factory with just a few employees and no elaborate plant). However, the Government has already set out major guide-lines; in the context of the new Plan it will be useful to spell out such guide-lines in more detail, in relation to their application to new industries. Industries will be divided into four categories:—

(i) *Wholly controlled.*

A limited number of strategic industries in which the Government or its parastatal organizations will own 100 per cent of the equity, e.g. banking, insurance, petroleum exploitation, armaments;

(ii) *Government Controlled Industries.*

Basic industries in which Government (or its appointed agent) usually acquires more than 50 per cent of the voting and participating shares of sufficient concerns to account for the major share of that industrial branch in order to exercise effective policy control.

(iii) *Partnership—Joint Ventures.*

Under this group industries are listed upon which a large section of the population depend for their living, or which provide essential components for other industries. In such industries, Government or its appointed agents (including the Co-operative Movement, NUTA and local government organizations) will play an active role, although not necessarily holding a controlling interest. This role will be adjusted through the business initiatives of the parastatals and other peoples' concerns in light of Government policy.

(iv) *Open Industries.*

All other industries are listed under this group. These industries are open to all sectors, including Government, local and foreign private investors. Within this group there are a number of industries which involve small and medium scale operations; in this sector an increasing role will be played by decentralized peoples' industries—controlled by the Co-operative Movement and other local organizations.

104. The encouragement of decentralized peoples' industries involves both the identification and promotion of projects which could be effectively operated, and the operation of public policies to support such enterprises when they are created—thus the large parastatals will be expected to encourage and support such enterprises.

105. The Ministry of Commerce and Industries will provide guidance to co-operatives, workers' organizations, municipalities and private investors of investment possibilities open to them. A large number of such possibilities has been identified at the pre-feasibility stage in the Plan Programme.

I. *Promotion of Small Industry.*

106. Small industry is defined for this purpose as those projects involving employment of 10 to 70 jobs. In the overall industrial target, plants of this size account for three-fifths of the projected new plants, 15 per cent of the proposed investment and will generate roughly 10 per cent of the resulting output, and account for about 15 per cent of the expected employment.

107. Small projects have a number of advantages:—

(i) no complex organizational, managerial experience is required;

(ii) small projects provide a good school for managers to gain the experience to manage medium scale enterprises; and

(iii) such projects can potentially be located in minor centres.

108. However, in order to create a substantial development of small industry, a number of disadvantages must be evercome: —

(i) it is difficult to supply technical know-how—the projects are too small to justify employment of fully qualified professionals, for example;

(ii) it is often difficult to achieve and maintain a high standard of design and quality;

(iii) the supply of materials is difficult to handle efficiently on a small scale;

(iv) similary small firms are at a disadvantage in marketing, particularly in export markets; and

(v) initial financing is difficult, because of lack of capital and suitable collateral—this is as true for co-operative ventures as for private initiatives.

109. The solution that will be sought to these problems, particularly (i)—(iv), will be the creation of industry centres. It is the intention to work towards a situation where specialized centres are in operation to support food processing, textiles and clothing, furniture and wood products, leather goods, plastic goods, applied ceramics, metal products, electric products, bicycle and bicycle parts and transport equipment.

110. These centres will be started in a very small way, with a manager responsible for implementation and a technical specialist, initially concentrating on one pilot plant, using that as a training ground for those who will participate in additional projects. The projects thus created will be converted into co-operative productive institutions when fully operative. As the industry grows, the centre will be expanded, and will provide design, material supply and marketing services and will exercise quality control.

111. In the case of textiles and clothing the promotion of small scale production will be part of the responsibility of a textile institute which will also be responsible for aiding the larger concerns with technical design and marketing advice.

112. It is intended to relate these centres to the Technical College and the University, thus creating a link between the academic environment and the practical problems of industrialization.

113. These small industries can be particularly important in providing diversity in the domestic market which will not be possible from the products of a few large, mass production factories. Also, with the passage of time, it is to be expected that a few of these small projects will blossom into quite large concerns.

J. *Crafts and Cottage Industries.*

114. In addition to the project possibilities identified in the programme, there is a diversity of possibilities for the individual craftsmen or small team, operating as tailors, carpenters, metalworkers, etc. In principle, the problems to be faced by craft and cottage industries are similar to those of small industry set out in the previous section. The possibilities are even more diverse and widespread; possibilities for the development of crafts exist throughout the rural areas as part of the pattern of development of rural life, without the development of organized factory operation. However, because of the very diversity of the possibilities and the existing situation, it is difficult to analyse the situation in quantitative terms, or identify the dimensions of probable expansion.

115. The following discussion is therefore qualitative. Moreover, it is evidently an area where considerable possibilities will arise as the ujamaa village movement gathers momentum and provides a framework for rural co-operative productive activity. Small-scale production of building materials, furniture making for home and school, cloth dyeing and clothes making, manufacture of simple household utensils including pottery the repair of farm equipment, food preserving, carpet making, are all activities which could be fostered in the ujamaa village and could lead to trade amongst villages. Maendeleo will participate in the promotion of such activities.

116. In principle three types of craft activity can be identified:

(i) basic needs in the rural areas may be met by local craftsmen, who employ simple technology;

(ii) with the development of communication systems between villages, and the growth in internal trade, specialization can increase. The managerial aspects of industry become important, particularly in relation to marketing and to credit for expansion purposes; and

(iii) the artistically oriented craftsmen may produce quality goods which claim richer markets—the most notable Tanzanian case being Makonde sculpture, but other possibilities exist which are, as yet, little developed.

117. The critical problem which must be faced is the vulnerability of production of such items as household utensils, agricultural implements and clothing, to competition from factory production, e.g. the expansion of factory shoe production resulted in a decline in small-scale footwear manufacture. The improvement of communications, for instance, results both in exposing local small-scale undertakings to competition from the outside, at the same time as bringing larger markets close to the producers. Similarly, with development, new opportunities spring up, e.g. with the growth in the use of motor cars and tractors, small-scale servicing industries can develop.

118. The critical first step in the promotion of a successful craft industry programme involves the identification and design of a range of potential products adapted to the possibilities of cottage industry production—the product must be attractive enough to find a market at a price which will cover the costs involved and provide the craftsman with a return commensurate with the effort, training and skill required.

119. Finance is inevitably a problem. The creation of the Rural Development Bank (see Chapter III) and the N.D.C. subsidiary, the National Small Industries Corporation, will greatly increase the possibilities in this area. The introduction of hire purchase of machines and other equipment by the N.B.C. will provide a further source of finance.

120. The prospects for development of small-scale industry suggest the need for an eventual development of a substantial infra-structure of institutions and services to meet the development needs of small-scale industry. The range of problems is complex enough that a pragmatic approach is required—no one blue-print for future development will suffice.

121. At the moment, the two main institutions handling the technical problems in this area are the National Small Industries Corporation and the Cottage Industries Training Programme. Both of these schemes involve somewhat expensive methods of training; this presents a problem, not only because in a narrow economic sense it makes it difficult to be economically viable, but also because it necessarily limits the coverage, restricting the number of participants because of the overall scarcity of finance.

122. In addition to the expansion of these programmes (which could become focal points for the accumulation of basic knowledge about the problems of craft and cottage industry) it will be necessary to bring training increasingly to the craftsman at his workplace, develop apprenticeship schemes around them and provide expanded vocational industrial training through existing educational channels. Above all, these isolated cottage industries must be assisted in design, on-the-job training and marketing. Existing programmes do not meet the need; during the Plan period activities under this head will be expanded, particularly in the context of the development of Ujamaa communities.

K. *Industrial Planning Organization*.

123. Industrial development possibilities in the Second Plan may be divided into a number of categories:

(1) output expansion from projects already in operation during the First Plan, either through increased utilization of capacity or marginal expansions in plant;

(2) projects substantially implemented in the First Plan but not yet in production;

(3) projects already carried beyond the feasibility study stage, to which commitments have already been made during the First Plan period, but which will be implemented during the Second Plan;

(4) projects for which feasibility study has not yet been completed, but which may be implemented in the Second Plan period.

124. Because of the time lags involved between conception, study, implementation and full operation, much of the industrial output increase in the Second Plan must come from development under categories (1)—(3). A substantial part of the programme for the Plan period flows from the decisions made over the past five years; likewise, the project identification and evaluation undertaken in the coming five years will determine the industrial programme in the subsequent Plan period. Even more than in other sectors, industrial planning is a continuous process. With the publication of the Five Year Plan, therefore, there will be no break in industrial planning activity but rather a systematic effort to strengthen the system of industrial planning at all levels.

125. The key institutions involved in industrial planning are:

(1) the Ministry of Commerce and Industries;

(2) the Ministry of Economic Affairs and Development Planning; and

(3) the National Development Corporation.

126. Planning prior to the final decision about a project and its design may be viewed as having four stages—

(1) The initial overall *planning stage* identifies the major areas of possible development and sets preliminary marco-economic targets, based on availability of markets, capital, etc. Work in this area is primarily the responsibility of Devplan in consultation with the Ministry of Commerce and Industries and the Treasury who will report from time to time to the Economic Committee of the Cabinet.

(2) *Pre-feasibility Stage:* At this stage the overall targets are broken down into concrete projects and initially evaluated for viability. This is a critical stage, as it determines the range of possibilities from which the reality of industrial progress can be created. As the widest range of experience and know-how need to be mobilized at this stage, initiatives will be welcomed from a number of sources—the various ministries (including Kilimo in the agricultural processing and forestry fields) and parastatals. However, the primary responsibility will lie with the Ministry of Commerce and Industries using the Industrial Studies Centre, which is now well established for that purpose.

(3) *Feasibility Study:* Following preliminary examination, it will be the responsibility of the Ministry of Commerce and Industries, in consultation with Devplan, to decide whether there is a case for proceeding with the project. If the project appears consistent with programme objectives, a more elaborate feasibility study is required.

At the feasibility study stage, detailed information has to be gathered about the proposed process, the required equipment, and operating costs. In many cases it will be necessary to engage the services of an independent consultant with good recent practical experience in the industry concerned. The use of personnel having a general knowledge of a wide range of industries is ineffective in handling the detailed design of a project, except in cases where an existing factory in Tanzania can be used as a basis for calculations. Even then an outside consultant, having relevant information about recent developments in the relevant technology, might be necessary.

However, although technical consultants are necessary for many projects, they require specific terms of reference to take account of Tanzanian conditions, particularly in terms of the ready availability of labour, which makes more labour intensive intermediate technology appropriate in many cases where expensive machinery would be used in a more industrial economy where labour is scarce.

It is also necessary that all feasibility studies should specify implementation and management arrangements.

Managing the feasibility study is the responsibility in some cases of the ministries (i.e. when the eventual implementing organization has yet to be decided), but is also in numerous cases a matter for parastal organizations, particularly the National Development Corporation.

(4) *Final Planning Decision:* The feasibility study having been made, it will be examined by the Ministry of Commerce and Industries and Devplan for its consistency with policy objectives and costs and benefits in relation to the resource situation then operative. In the light of this final analysis, any necessary adjustments will be made and the required policy decisions will be made to ensure implementation (e.g. provision of protection; allocation to implementing agency, etc.).

L. *Implementation.*

127. The key to implementation is to place clear responsibility with an organization for carrying the project through to completion and within that organization to identify an individual who will be responsible for guiding the project through the various stages to completion.

128. The central institution for implementing industrial projects is the National Development Corporation. An important element of the Plan will be for the National Development Corporation to develop managerial talent of a calibre to initiate projects and manage them after completion.

129. The overall supply of potential managerial talent will be increased both through the training programmes of the proposed Institute of Development Management and through the training in management provided at the University. However, to provide sufficient talent, management will have to be recruited from a far wider range than those few with formal management training, while formal training will have to be backed up by effective on-the-job training.

130. The intention is that "project initiators" will be appointed in the feasibility study stage who will be held responsible for subsequent progress with the project. By participating in the process of feasibility study, design and construction of the project, project initiators will be qualified to participate fully in the management team that subsequently runs the project.

131. Implementation translates an idea into reality. If it is done badly, the capital and recurrent costs will be much higher than is necessary and a project which is viable in principle may fail in practice. There is need for careful, independent evaluation of the cheapest source of supply of the required capital equipment and, in particular, care regarding utilization of tied finance for equipment purchase, which may sometimes greatly increase the cost of the project.

132. The magnitude of the task is illustrated by the number of projects. Three hundred new projects will require as many as one thousand higher and middle management personnel. The importance of this cadre is that it will also provide the experienced leadership for subsequent development. As it must be expected that not all recruits will perform to the very high standards, recruitment needs will

be of the order of 1,300–1,500 individuals. The creation of a set of institutions not only to train, but also to identify, recruit and develop this cadre through on-the-job training will therefore be a high priority activity of the Ministry of Commerce and Industries in the first two years of the Plan.

133. The implementation procedure for smaller projects will be handled through the special industrial centres set out in the section on small industries.

CHAPTER V

MINING

Mineral resources are an important natural asset of a nation but by their very nature they are exhaustable. As one resource is used up, others must be developed. Existing diamonds supplies have a strictly limited future capacity. The aim of the Second Plan is to develop other mining possibilities, while continuing to exploit the diamond resources at a somewhat lower level than over the First Plan.

A. *Performance During the First Plan.*

2. The table below indicates, in value terms, total mineral production and exports during the First Plan period:—

TABLE I

MINERAL PRODUCTION AND EXPORTS DURING FIRST PLAN PERIOD

(Shs. millions)

Year	Total Mineral Production	Total Mineral Exports	Exports as per centage of Production
1964	176	171	97
1965	188	184	98
1966	223	219	99
1967	248	243	98
1968 (Provisional) ...	164	156	95

Note:—The above figures do not include building minerals as the collection of statistics for these minerals was discontinued 5 years ago. Moreover, as no royalty is paid on the output oe these minerals and rents are collected instead, it is not possible to estimate current production levels.

3. If building minerals, for which no estimates are available, are excluded, less than 5 per cent of the aggregate mineral production is retained within the country. There is an almost complete lack of mineral based industries within Tanzania.

4. The First Plan envisaged a 4·1 per cent per annum rate of growth of mineral production during the sixties. The years 1965, 1966 and 1967 registered increases of the order of 7 per cent, 18 per cent and 11 per cent respectively over the preceding years, but the estimated production during 1968 was 34 per cent lower than in 1967, that is, even less than at the beginning of the First Plan period.

5. The fluctuations in the annual mineral production follow the changes in the annual throughput of diamonds which account for over four-fifths of the total mineral production by value. The estimated life of the existing deposits is about 10 years and the annual throughput during the Second Plan period will be considerably lower than in the First Plan. Gold accounted for more than one-tenth of total mineral production until 1965, but with the closure of two main gold mines, Geita and Tangold, in 1966, the relative share of gold has dropped to about 2 per cent. The only remaining major gold producer is the Buhemba Mine, which is also scheduled to be closed by the middle of 1970. Thereafter, until such time as new deposits can be exploited, gold production will be negligible.

6. Diamonds and gold together have traditionally accounted for about nine-tenths of total mineral production; the remaining 10 per cent being made up of salt, tin concentrates, gem-stones, mica and small quantities of magnesite, tungsten, lime, gypsum, glass-sand, kaolin, coal and meerschaum, etc. Of these, coal, glass-sand, kaolin, gypsum and lime are largely for internal consumption. Salt is exported in considerable quantities in addition to meeting the domestic demand. The remaining minerals are for export.

7. As a result of declining throughput of diamonds and gold, the growth in production from this sector during the Second Plan will be considerably less than the rate of growth of 2·9 per cent envisaged in the First Plan for the period 1970–1980.

B. *Second Plan Policy.*

8. There will be a vigorous effort to develop the new mineral resources that have already been identified for future exploitation. There is a long gestation period for mineral projects. Advance planning of such projects is therefore important, particularly to implement infrastructural work that will reduce the lag between the conception and realization of a project.

9. There will be an aggressive policy of geological survey and mineral exploration to identify new mineral resources for future exploitation. Moreover, the results of mineral exploration will be quickly followed up and transformed into productive investments in a systematic and planned manner.

10. Mineral based industries, wherever feasible, should give priority to the use of local mineral resources. In some cases, the cost of local mineral raw materials may be somewhat higher than the imported ones. While the micro-profitability analysis of the individual project may, in such cases, not justify the use of local materials, the criterion in these cases has to be the return to the economy as a whole. In suitable cases, assistance will be provided to encourage this end.

11. In the context of the Arusha Declaration, there will be firm social control over the exploitation of major mineral resources. The State will intervene actively and directly in the major means of production which exploit the mineral resources of the country.

12. Through the National Development Corporation, Government has a considerable investment in the few major mining undertakings, and diamond-cutting and gemstone-cutting projects. In addition to these large-scale mineral projects largely controlled by the State, there are numerous widely scattered, small deposits of various minerals. These small-scale operations provide employment, frequently of a seasonal nature in rotation with crop production, for a good number of people. Government will assist such workers by all means at its disposal. Exploitation by ujamaa village groups, local co-operative groups, district authorities such as district councils or local organizations will be encouraged; to this end, the Mineral Resources Division will make its contribution in prospectors courses and provision of other development and routine services. In addition, the Co-operative Development Division will lay emphasis on strengthening the organization and administration of those mining co-operatives in existence, and in forming other suitable small-worker co-operatives in existence, and in forming other suitable small-worker co-operative groups in consultation with the Mineral Resources Division.

13. Government will continue the long-term intensive geological mapping, prospecting and mineral exploration programme, with great stress being laid on mineral prospecting. Where new mineral resources are discovered, responsibility for their development will be allocated as rapidly as possible in order to bring such deposits to the exploitation stage quickly.

14. Once a specific deposit has been proved and can go into production, Government will determine the policy to be followed in exploiting the deposit, taking into account economic, technical and other relevant factors.

15. Government will also encourage the utilization of local mineral raw materials in mineral-based industries in preference to comparable quality (or even somewhat superior) imported materials, wherever this is possible. If necessary, it will protect the local materials against compensation from imported raw materials.

16. The mining and related ordinances and regulations are very important in implementation of mining policy. Amendments and revisions which will be introduced in the near future will bring the mining law more into conformity with the concepts of the Arusha Declaration. Stricter control will be imposed on the issue, revocation and cancellation of prospecting rights and mining claims and of mining leases, exclusive prospecting licences and special exclusive prospecting licences.

17. The ujamaa village worker operating on a small scale will be encouraged not only to increase productivity of a working mine but also to prospect for new mineral deposits. Government's policy, therefore, in this sub-sector is to give basic training in prospecting and small-scale mining.

18. In addition, the small-scale worker will receive support in the form of credit arrangements to purchase simple equipment and to undertake production and development operations. The services of the Mineral Resources Division will be drawn on for advice and to obtain technical evaluations of properties, upon the basis of which credit can be offered.

19. Finally, Government will establish an economically-orientated special technical unit, with the task of advising on the feasibility, development, promotion, pre-investment and utilization stages of mineral resources. The unit's scope will allow it to take the initiative for follow-up of all studies, and to take all necessary steps to ensure that action does not lag by the relevant institution or organization responsible for promotion and implementing the project. In its promotion endeavours, the unit will have the authority to make contact with industrial groups and specialist consultants and to arrange for Government to obtain the services, where required, of the latter.

20. Work of this type has been done for some years by individual economists and related personnel in NDC and INDCENTRE in association with the staff of the Mineral Resources Division. For example, NDC has examined the Minjingu phosphate, Pugu kaolin, Lake Natron soda deposits, and the gemstone industry; while INDCENTRE has been involved in studies of iron ore, Minjingu phosphate, the development of the pyrite body at Samena near Geita, gold and Lake Natron soda deposits.

21. The mineral resources development unit will be kept free of routine departmental work. In its advisory capacity, it will closely co-ordinate with the normal technical activities of the Mineral Resources Division. Officers of the Mineral Resources Division trained in the economics of minerals will participate in the work of the unit. The recruitment of additional staff for this unit will have high priority.

C. *Forecasts and Targets for the Second Plan.*

22. Table II sets out the proposed production and exports goals for the various minerals, excluding building minerals. With the anticipated further fall in gold production and little likelihood of any boost until well into the Second Plan, and

the decline, anticipated in the mining plan for Mwadui, in the value of diamonds over the period of the Second Plan, the foreseeable result will be a marked fall in total mineral production. This is an incentive to renewed geological exploration and prospecting efforts to discover other mineral deposits exploitation of which will reverse this trend.

23. The potential for salt is large. The new equipment envisaged for Uvinza is likely to reduce the cost of production.

24. Gemstones are expected to increase in output, although with the establishment of a cutting factory there may be a considerable drop-off in exports of rough material.

25. Tin and mica also have good potential, whilst kaolin and glass-sands at the very least should increase steadily, and the future of kaolin could become very bright if present studies can establish export markets.

TABLE II

MINERAL OUTPUT AND EXPORTS

(Shs. million)

Mineral	1968		1973	
	Output	Exports	Output	Exports
1. Coal	159	—	200	—
2. Gold	4,811	4,811	800	800
3. Silver	37	37	7	7
4. Tin	6,900	6,900	8,380	8,380
5. Tungsten	507	507	750	750
6. Lime	1,032	—	1,000	—
7. Kaolin and glass-sand	222	—	356	—
8. Salt...	9,615	3,480	15,400	5,500
9. Gypsum	125	4	550	—
10. Mica	1,302	1,302	2,100	2,100
11. Magnesite	498	498	639	639
12. Gemstones	2,809	2,807	4,120	4,120
13. Diamonds	135,500	135,500	94,000	94,000
14. Others	69	28	98	49
Total Production	163,532	155,820	128,400	116,340
Less Material inputs	36,958	...	18,400	
Net Sector Contribution	126,574	...	110,000	
Of which: Royalties	21,725	...	15,820	
Diamond Levy	6,775	...	4,700	

Note 1.—Figures for 1968 are provisional estimates.

Note 2.—Local sales of lime have widely fluctuated in the past. As construction activity is envisaged in the Second Plan to increased at a rate of 10 per cent per annum, the same rate has been assumed over the average of the three years 1966–68 as base for the forecast for 1973.

D. *Programmes for Sub-sectors*

Diamonds.

26. Diamond is the most valuable of the minerals mined in Tanzania. For some years, the public sector has enjoyed considerable income from diamond production from the Williamson Diamonds Limited group of companies, jointly owned by Government (through the agency of N.D.C.) and De Beers (through the Willcroft Company).

During the period of the Second Plan, the production of rough diamonds is likely to fall. If this happens, there will be a resulting decrease in profits, royalties, diamond levy, etc. A cautious estimate has therefore been made of diamond output over the plan.

27. Prospecting operations continue by the company on the property and also in selected outside areas to locate and examine other kimberlite bodies as sources of diamonds. This outside prospecting is financed by a loan from De Beers which will only be repayable in the event of profitable exploitation of deposits found by the prospecting.

28. The establishment in 1966 in London of the Tanzania Government Sorting Organization and the re-negotiation of the Diamond Sales Agreement, which is binding for the five-year period 1st January 1966, to 31st December 1970, and which authorized the establishment of T.G.D.S.O., have been considerable factors in ensuring stability in the prices and in increasing the return from the rough gem diamonds.

29. The Tanzania Diamond Cutting Company (75 per cent owned by N.D.C.) established in Iringa in the course of the First Plan, is still having a variety of teething troubles. It is believed that the early part of the Second Plan will be a crucial period for the growth of this undertaking.

Iron Ore and Development at Liganga.

30. The Liganga titaniferous iron ore deposit, situated some 50 km. north of the Ketewaka–Mchuchuma coalfield, has been estimated to be of the order of 78,000,000 tons, with 49 per cent ferrous content and 13 per cent titanium dioxide. Concentration will be on direct reduction of the titaniferous iron ore, more or less as mined. Direct reduction methods have been under investigation for over 20 years, with experimental success, and it is believed that such a method could be geared to profitable exploitation of modest size and with production units of small enough scale for the demand and consumption in the iron and steel industry in East Africa. Technological investigations at present being undertaken are aimed at establishing which direct reduction method can be applied to the Liganga ore on an industrial scale.

31. During the Second Plan a detailed feasibility study will be undertaken which will include also the development possibilities for the adjacent coal. This will examine the market potential in light of the economic scale of operations and capital costs of construction. It will also take into account phasing of the project in light of communication development, specifically the possibilities of a rail link of at least 200 km. to the proposed main TANZAM line, or alternatively of establishing a pipeline method of transporting the slurried ore to a plant possibly on the main railway and served with electrical power. The alternative sources of electrical power for the first construction phase and the subsequent production, will be considered, including the possible use of the Ruhuhu coal for firing such a plant.

32. If it is proved to be feasible a beginning will be made on the project during the course of the Second Plan. By the time that the long-term industrial plan is prepared in 2 or 3 years' time, it is anticipated that the project will have been thoroughly examined and a decision made as to whether or not the construction phase proceeds, either at Liganga or elsewhere. Comparative cost-benefit-analyses of a number of alternative road links with the existing system from Njombe, for transport of construction material and equipment to Liganga for the plant and on to the coalfield, is being undertaken, as this phase will be well ahead of rail link construction.

Coal.

33. The very small Ilima colliery, privately owned, produces medium grade coal for very local consumption in the district from the restricted Ilima block of the Songwe–Kiwira coal-field, in which block reserves of exploitable coal have yet to be established. Also, there are sizeable deposits of bituminous coal in the Ruhuhu valley. Distance from the coast makes it unlikely that coal from these deposits will be competitive overseas. Exploitation of coal resources on a big scale is, therefore, closely associated with the long-term development of the nearby Liganga iron ore deposit. While the traditional blast furnace method of steel production requires cooking coal, which is not available in Ruhuhu, the electrolytic processes which are necessary with titaniferous iron ore will utilize the bituminous coal locally available.

34. Also, the long-term industrial needs of Tanzania and neighbouring countries are likely to provide a significant market for coal. Further investigation of the Ruhuhu and Songwe–Kiwira deposits will therefore be undertaken.

35. At Ilima colliery, a detailed technological study was made early in the First Plan for colliery modernization and a small plant to produce 30 tons of coke (or smokeless fuel) per day with small quantities of tar for road-making, gas and ammonia liquor for use as a simple fertilizer, with possibilities for a small coal-field power generating station for the mine and coal processing. Further work is to proceed on the potential market for the processed products and the preferable location in view of raw material reserves.

Gold and Further Prospecting.

36. The official world market price of gold, functioning as an international monetary metal, remained pegged at 35 U.S. dollars per ounce parity (established over 30 years ago) during all of the First Plan. In the last year of the Plan, the two-tier gold price was established on international markets by the International Gold Pool to meet the crisis demands for gold, and the free market price in Europe has risen recently to as much as 49 U.S. dollars per ounce of gold.

37. Indications are that within a year of the start of the Second Plan, gold production in Tanzania will have dropped to the very small amount produced by small-workers, as the Buhemba gold mine, the only major source of gold since the closure in 1966 of the major sources of Geita and Kiabakari, is now in its final stage of operations under its present owners and it is expected to cease production by the early part of 1970 unless additional payable ore can be found by development now in progress.

38. The closures of Geita and Kiabakari were severe blows to the mining industry in the first part of the First Plan. Kiabakari ran out of suitable ore reserves. At Geita, a combination of the marginal grade of ore, the pegged gold price and increasing production costs rendered production unprofitable.

39. In light of these developments a three-year development project to explore the Lake Victoria gold-fields was mounted in conjunction with the U.N.D.P. with the aim of generally rejuvenating the industry and discovering indications of new deposits. The Sarama, Geita and Musoma fields constitute the main areas of the Lake Victoria gold-fields, but the project also examined the North Mara area.

40. As a result of the project, interest has been focussed on the small Buck Reef deposit lying some 20 miles south-west of Geita. The go-ahead for a proposed programme of underground investigations on the Buck Reef depends on the results of follow-up drilling recently completed by the Mineral Resources

Division. Preliminary results from the drilling would indicate that mineralization in the Buck Reef is less extensive than the UN project had indicated, being limited to a strike of 1,200 feet, with reserves of around 350,000 tons at controlled grade of 6 hundredweights per ton, indicating the possibility of a small mine of a limited life of at most 10 to 12 years.

41. If the Buck Reef deposit proves to be exploitable it will come into operation during the Plan. However, as final steps to implement exploitation has yet to be made, no allowance has been made for output from this mine in the output forecast. The rough estimate of capital outlay is Shs. 20,000,000/-.

42. A further study of the abandoned Geita mine with a view to revive it and operate it in conjunction with the Buck Reef deposit, will be done simultaneously with the Buck Reef work. The first stage will involve a drilling programme at a cost of Shs. 150,000/-, which will indicate if further development is feasible.

43. The Lupa gold-field, once a highly productive largely alluvial field, will be systematically re-examined. Modern methods of prospecting will be employed, and work will be done in detail over four years.

Gemstones.

44. Unlike diamonds, there is little international control of the production and price of the ordinary range of rough gemstones such as are presently being mined in Tanzania and exported in considerable amount. The output of gemstones during the First Plan has increased phenomenally, the provisional officially-logged figure for 1968 being Shs. 2,700,000/-—4 times what it was in 1964. Less than a decade ago these were seen in Tanzania rather as novelties or curiosities with little earning capacity. However, in 1968, there was a levelling off in this steep trend when there was a slight fall in legal exports as compared to 1967. The fluctuations in prices offered reflect changes in styles and fashions. The recently discovered gem-quality zoisite named "tanzanite", has been selling at a premium.

45. Gemstones are easily portable, easily concealed and high valued, and are mined at numerous isolated small workings by the small-worker type of operator on a very restricted budget and with no direct contact with buyers. The Gemstone Industry (Development and Protection) Act, to promote the gemstone industry, will be enforced in time for the start of the Second Plan, and it is anticipated that a suitably qualified reputable gemstone valuer will be appointed during 1969, to set up the gemstone valuation and marketing organization envisaged under the Act. Additional control will be effected through the gemstone cutting factory which will come into production in Arusha early in the Second Plan period. It will cut and export local material. This company has been formed with a controlling public sector interest, and Arusha was chosen because it has developed as the centre of the gemstone trade. Government will ensure the availability of adequate supplies of suitable rough gemstones for processing at the factory. As the object of this development is to ensure that most of the cut stones will be exported, the result should be a far greater and more controlled return—and a significant increase in earnings of foreign exchange—from the gemstone industry than if rough gemstones alone were exported. The Mineral Resources Division has allocated a geologist and supporting staff for prospecting work on gemstones and for advice to the small-worker.

Tin and Tungsten and Prospecting in the Karagwe Area.

46. In international trade, mine production of tin concentrates is roughly in balance with reported consumption, and the factors are such as to anticipate continuation of this situation. Over recent years, the price of tin has fluctuated. However, efforts have been made by the International Tin Council to maintain stability. Tungsten, on the other hand, is showing reasonable stability after a period of price swings. In consideration of tungsten's recent value, a growth goal of 8 per cent per annum, double that for tin, has been set for the Second Plan.

47. All of the tin and tungsten produced in Tanzania—in the Karagwe area—is exported.

48. The possibilities of utilizing the tin locally have been set aside for the time being because of the difficulties in processing the cassiterite. Apart from the Kyerwa tin mine, rejuvenated under new management and again producing about one-third of Tanzania's tin sales, production is from small-workers operating generally in a primitive and wasteful manner. A joint study with the Co-operative Development Division will investigate whether co-operative organization could form the basis for more efficient production.

49. Previous investigations have concluded that there are no great reserves of tin or tungsten to warrant large capital investment. However, further systematic study is required of the geology mining and mineral dressing of the deposits of tin and tungsten in Karagwe. Intensive field work will occupy about 18 months.

Salt and Soda-ash and Survey of Brines and Salt Crusts of Rift Lakes.

50. Salt is a commodity which in general is not in short world supply, and is very cheap. In Tanzania, there is fundamentally an under-utilization of salt. The domestic consumption (at under 2 kg. per head per year) is low as far as health requirements are concerned. As salt becomes more easily available with increased production, refining and better organized distribution, and at a lower price domestic sales of salt will rise faster than the natural increase in population.

51. In isolated parts of the country, local methods have been developed for obtaining what is generally impure, and may be dangerous, salt for consumption and trading.

52. Roughly 4,000 tons of fine, packaged table salt is currently being imported for domestic use annually. This could be replaced by refined locally produced salt. There is a project in the Second Plan to meet this need.

53. Industrial projects at present in the planning stage will increase very considerably the domestic demand for coarse salt.

54. Of the present annual production of coarse salt, averaging over the last few years about 35,000 tons, more than 30 per cent is currently being exported to the neighbouring East and Central African markets, mainly from the Uvinza salt works which has accounted for roughly 65 per cent of the total production. Almost all of the remaining 35 per cent of coarse salt is produced from evaporation of sea water along the coast, from about a dozen solar evaporation pans. Expansion will be concentrated at the N.D.C. Uvinza mine to meet expanding domestic demand and to exploit the export potential.

Mica and Mica Prospecting.

55. The world market for good quality mica such as can be produced in Tanzania remains good and is likely to maintain its stability and perhaps even increase in prices. Mica from Tanzania is much in demand and it appears that export could be increased. It is, therefore, a matter of concern that the production and export of mica has fallen in value in recent years.

56. Mica, being a pegmatite mineral, has an irregular occurance in its containing rocks, and mica-bearing pegmatites themselves generally show variation in strike extension and are irregularly distributed. They frequently occur in poorly accessible and rough country. Mining of mica, therefore, has been on a small, shallow and simple scale and the province of the rural small-worker frequently operating on a seasonal basis in conjunction with cultivation.

57. In the case of the Uluguru Mountains area, which is the main mica producing area, the mica miners have formed a co-operative which has negotiated marketing of the product. The co-operative has an agreement with licenced mica dealers NAMCO and FFC which export to their parent companies after cutting, sorting and grading. Both dealers also have their own mica mines worked by local people.

58. It is believed that, as a rural and small-worker industry co-operatively organized, there is a considerable growth potential provided the product offered for export continues to be of a good standard.

59. Therefore, the Mineral Resources Division's project for a mica prospecting team was evolved. The project is intended to undertake initial development of mica prospects and assess their value and advise on the best simple method to be applied for mining and treating the material. In conjunction with the prospectors' course, it will also assist in the earlier stages of prospecting for mica. The project will be reflected in the production figures by about 1972, provided no disastrous rainy season intervenes.

Kaolin and Glass-sands.

60. The relatively small but increasing amounts of kaolin produced over the last few years by simple beneficiation of the sedimentary soft kaolinitic sandstone deposits forming the Pugu Hills, have been fully absorbed in the domestic chemical and ceramic industries in the nearby Dar es Salaam area. The expected expansion of these industries and the extra demand arising by the establishment of new rubber tyre and paper industries, will stimulate increased production of Pugu kaolin, eventually leading to extension of the present workings and more sophisticated extraction methods.

61. An annual increased production for local consumption of 10 per cent is forecast.

62. The export potential of high-grade kaolin produced in bulk, and with very large reserves of raw material to draw on, is attractive; and over a number of years various major groups have examined the possibility of exploiting the Pugu kaolin on a large scale. An industrial project has been included in the Second Plan which is subject to further feasibility study.

63. In the treating of the Pugu kaolinitic sandstone for kaolin, a reasonably pure clean sand which is suitable as a glass sand is produced for the local industry currently producing glass-ware and bottles. It is not certain if this sand could be used in the production of plate or sheet glass for East African markets. Tests will have to be undertaken on this as well as on the clean, well-rounded, lake-shore silica sands, reported to be very low in impurities which have been mapped in the vicinity of Bukoba. The latter deposits are estimated to be abundant, but further prospecting will be required to prove reserves.

Magnesite.

64. Magnesia, obtained by calcining natural crude magnesite or by extraction from sea water, finds its most important use in basic refractories which demand a high quality. Another use of possible application in Tanzania is in the paper pulp industry. Despite development of new magnesite deposits and new efforts in extraction of high quality magnesia from deposits, the world trend is growth of the sea water industry.

65. The Mgagao and Chambogo magnesite deposits are in the Pangani Valley in north-east Tanzania. The latter, which exported its first calcined magnesite in 1963—previously some magnesite mined in the Masai District had been exported in its crude state to Nairobi to the building trade—was recently the subject of a detailed investigation. The results were very disappointing, showing the percentage of recoverable magnesite to be much lower than the expected, and it is likely that this enterprise will continue on a small scale. A geologist will shortly examine and assess the Mgagao deposit where small-scale operations started about three years ago; difficulties are arising in quality control and production in 1968 ceased in mid-year.

Gypsum.

66. The gypsum of relatively low grade produced by rural small-workers from lake deposits located in the Mkomazi area in north-east Tanzania, has little or no export potential. At the moment, the domestic outlet is in the portland cement factory in Dar es Salaam and it may also be usable in the possible gypsum board factory project. Gypsum has other uses in local industry, on a small scale. The cement factory is expected to more than double production over the next two years and it is believed that the reserves of gypsum in the Mkomazi area should be adequate to meet the increased demand.

67. The Mkomazi gypsum producers must ensure a strict minimum specification of 70 per cent gypsum in their rail-car consignments to the Dar es Salaam cement factory, otherwise importation will become necessary from sources which can supply a very high grade product capable of being transported. It would be unfortunate to use foreign exchange on imports when extra effort by the producers could result in satisfactory utilization of local resources. Steps will be taken to provide increased supervision to solve this problem.

Lime, Limestone and Building Materials.

68. Growth and supply of lime will match expansion in domestic demand which is related to growth in the building industry and in road construction. An expansion averaging at least 10 per cent per annum is expected.

69. Expansion in cement production, discussed in the industrial chapter, will lead to an increased use of limestone. No mining returns have been collected for some years for stone, gravel and sand and brick-clay. These domestically produced and domestically-consumed materials are worked entirely to satisfy a local demand, as, when and where they are needed. They are bulky and very low cost minerals and, therefore, cannot support the heavy cost of transport over more than a few miles.

70. During the 1960s, the demand for building minerals has been rising very rapidly, and this trend will continue with the growth of construction activity envisaged in the Second Plan, not only in the vicinity of the large towns but also in the rural areas with the construction of major communications.

Phosphates.

71. The phosphate deposit concentrated immediately around Minjingu Hill, has been the subject of study since it was discovered by airborne scintillometer survey some 13 years ago. The latest was a feasibility study in 1966/67 which concluded that the Minjingu phosphate rock near Arusha is of adequate quality and can be mined successfully to provide a local source of raw material for manufacture of phosphate fertilizer for the domestic market, reserves being sufficient for at least 10 years. The complex fertilizer plant now under construction will initially use imported phosphate, but steps will be taken to ensure that locally produced phosphates will be used at an early date.

Crude Petroleum and Natural Gas Production and Exploration.

72. To keep pace with the increasing world market demands, there has been increasing production of crude mineral oil which is not only of economic interest to the parties looking for, producing and marketing oil, but has assumed a very obvious political and strategic importance at the national and international levels. At the moment, the world position is one of over-supply and oil reserves are adequate for the next few years, but exploration is continuing at a high rate in many parts of the world; particularly, there has been interest in off-shore exploration as a result of which the world oil reserves position should be increased appreciably. Government through its agency T.G.A. has recently concluded an agreement with AGIP—a subsidiary of the Italian Government owned ENI. T.G.A. will completely control any development of the oil industry, and all leases and oil prospecting licences will be issued in the name of T.G.A. Under the agreement, AGIP will be exclusively contracted to undertake the further exploration and prospecting and trial drilling of the entire coastal sedimentary belt and the continental shelf, using the most modern exploration techniques. This exploration phase may take up 12 years.

Other Minerals.

73. There are a large number of other minerals known to exist in Tanzania, some exploited on a very minor scale, some still being investigated, while others are sub-economic at current costs and world prices.

74. A minor contribution to the mining industry comes from ornamental stones, meerschaum, sepiolite, vermiculite, etc.

75. There are a number of new possibilities which may generate investment possibilities during the Plan.

76. The prospecting department of Williamson Diamonds Limited is currently evaluating copper and nickel deposits in the Piti River, South of Tabora.

77. With the 1969 dry season, the Mineral Resources Division will prospect in detail, drill and evaluate a copper prospect recently delineated near Chunya. Copper indications in the Pare-Usambara-Handeni area, although in general very small, have not all been prospected.

78. Soda Ash is a low cost salt which is finding increasing uses in industry, such as bleaching, glass-making, paper and soap. The possibility of utilizing the brine and salt crust of Lake Natron in the Arusha Region as a source of soda-ash is again being examined. Lake Natron is the most interesting of the rift valley salt lakes and reserves of natural sodium salts (largely soda-ash and common salt) are very large, so that the production potential is considerable. A study has already been started as to the feasibility of exploiting the Lake Natron deposit to meet the future industrial needs of Tanzania.

79. Other possibilities exist, such as nobium, rare earths, natural abrasives, asbestos, benzonite, diatomite, graphite, ryanite and zircoin, which might make a contribution in the future, as the economy develops and communications improve.

80. The possibility of using geothermal energy will be investigated in the coming Plan. There is also some possibility of uranium and other redioactive minerals occurring in the western part of the country.

E. *Geological Surveys.*

81. A scheme of basic geological mapping was initiated during the Three Year Development Plan of 1961–64, which was continued in the First Plan. About 34 per cent of the area still remains to be mapped; main areas being in the Tabora plain and the Nachingwea-Songea area. It is intended to cover an area of the order of about 44,000 square kilometers during the Second Plan in the Lupa area and Western Rift area. A recent study has recommended a four year programme for prospecting and investigations of Lupa area and geological mapping of Western Rift area on a scale of 1:125,000, simultaneously with detailed prospecting. Details of this project are presently being worked out. This will be backed up by re-equipment and strengthening of the Mineral Resources Division laboratory.

F. *Prospectors' Course.*

82. Prospectors' courses conducted prior to 1965, at the course headquarters at Morogoro and also by means of a mobile instruction unit were of some success. An essential service of the Mineral Resources Division is to the small prospector. The Division seeks to attract as many suitable people as possible into prospecting for economic minerals. This can be done by means of such prospectors' course.

83. It is proposed that in future candidates should be sponsored by ujamaa villages or groups of villages, so that on their return home they will have a duty not only to carry out prospecting but also to initiate and interest their comrades in this type of work.

CHAPTER VI

TRANSPORT AND COMMUNICATIONS

This chapter sets the communications programme for the Second Plan into the context of long-term strategy; in so doing, it sets out the major policies which have emerged as the basis for thinking about transport development in Tanzania. Running through this discussion is a constant concern to balance two alternative objectives:

(i) *Improvement*.

2. The need to *improve* existing service; improving the standard of existing roads and eliminating bottlenecks arising from the pressure of expanding traffic on existing capacity. Investments economically justified on the basis of meeting this objective tend to emphasize the expansion of services to the fastest growing areas—transport is seen as a service which *follows* the development of other sectors.

(ii) *Development*.

3. The need to open new areas; creating traffic where none existed before, providing development opportunities to areas where, in the past, the absence of facilities itself prevented development. Investments in such transport facilities *precede* development, cannot be justified on the basis of obviously existing demand and must be justified on expectations regarding the *development potential* of the area serviced.

4. A long-term strategy is outlined, but in considering the transport programme some of the most difficult decisions regarding projects in the Second Plan had to be made. The scarcity of resources limits the size of the transport programme to a level below that which could be effectively implemented and which could, ignoring the problems of overall resource availability, be well justified.

5. During the First Plan, after initial difficulties, the capacity to invest in roads was built up impressively, particularly through the use of external consultants and contractors. Also, the road programme became one of the more attractive sectors from the point of view of external finance. As a result, the road programme commanded a greater share of the development budget than had originally been intended in the First Plan.

6. Nevertheless, the road system was such that at the end of the First Plan there is a vast potential remaining for productive investment in road development. Alongside this, the development of air transport requires a continuing investment in airport development. The choice of projects in this sector was therefore particularly difficult.

A. *Planning Techniques and Procedures*.

7. A long-term perspective for the trunk road network based on the existing and future pattern of population distribution, marketed agricultural production and other economic activities and the development of urban centres is outlined in the next section. A good trunk road network is an important factor for the economic and social integration of the country and for the encouragement of internal trade.

8. The expected phasing of this long-term programme is set out in the following section. To bring the whole system up to fully bitumenized standards will take three or four Plan periods.

9. Meanwhile, to develop a grid network that is passable all year round, a policy of gradual improvement has been adopted. Elimination of bottlenecks such as bridges and flooded stretches that block roads during the rains can be affected by a programme of structural and pavement improvements carried out by the proposed *betterment units*. These units will make investment in roads more flexible and should show tremendous returns to the capital invested.

10. In general, the Government's road construction policy is based on the need to provide a country-wide "low cost road" system defined as follows: "A low cost road is one which, having regard to considerations of climate and traffic, has been located and built to geometrical standards commensurate with future requirements but has been constructed with bases and surface to meet the present traffic requirements. It is, however, one which should be so designed, constructed and maintained that it allows for stage construction when raffic requires it and improvement in economic conditions permit". That is, road development will be phased to meet growing needs but basic planning will take account of the projected long-term development.

Attempts are being made to standardize the methodology used for the evaluation of road projects in the whole country. This will enable planners to make direct comparisons and establish priorities between different projects in this sector. To date, feasibility studies carried out by different consultants used different methods and assumptions. Feasibility studies based on a standard methodology should and could be prepared within Government without the use of foreign consultants as staff becomes available. Tanzania can become self-sufficient in basic transport planning. As one prerequisite for such a procedure a permanent traffic counting team has been set up by the Comworks Planning Unit. It will be able to provide detailed and reliable traffic data.

11. For all major road projects separate economic feasibility studies have been prepared to ensure the economic soundness of each project. The following general criteria for the standards of different roads are based on a comparison of the economic benefits which are expected to accrue with the costs of construction and increased maintenance:

(i) Minor feeder roads with an average daily traffic of 5–20 vehicles to be improved by the provision of permanent bridges and culverts. The average estimated cost would be in the region of Sh. 15,000/- to 20,000/ per mile.

(ii) Other feeder roads with an average daily traffic of 20–60 vehicles to be improved by the provision of permanent bridging and culverting, minor vertical and horizontal realignments, drainage, formation works and gravelling of bad spots. Average estimated cost around Shs. 60,000/- per mile, the actual cost depending on whether bridging and culverts have already been provided under (a) in accordance with the policy of stage construction.

(iii) Roads with an average daily traffic of 60–150 vehicles which may eventually develop into highways. Before any improvements are carried out an economic feasibility study and an engineering survey is required. The type of surfaces to be provided will be stabilized earth engineered gravel depending on the nature of the local soils. The average estimated cost is Shs. 150,000/- to Shs. 300,000/- per mile according to the type of surface required and terrain.

(iv) Wherever the average daily traffic is 150–1,200 vehicle a bitumenous surface is required and a 20 to 22 foot wide carriageway with an appropriate bitumen seal should be provided at an estimated average cost of Shs. 250,000/- to Shs. 400,000/- per mile. This cost is inclusive of previous construction carried out under (c). Pavement design will depend on traffic density.

(v) For traffic densities of over 1,200 vehicles per day a 24 foot wide carriageway would be required to give a total of 3 inch thick bitumenous carpet on the existing bitumen seal.

12. The methodology of evaluating the up-grading of existing roads based on benefits accruing from saving, on vehicles operating costs and maintenance expenditure is fairly simple, generally utilized and easy to standardize. Based on the standard methodology, projects can easily be identified that are economically justified and where there is at least no danger of wasting money. But this money might have been used *more effectively* elsewhere as very little is known about the proper methodology of evaluating development effects of minor roads. Assumptions that have to be made for feeder roads are much more hazardous and the degree of certainty about the economic soundness of individual projects is much less than for the main roads.

13. For these reasons there is always the danger that the road programme will show a bias towards helping already developing areas and somewhat neglecting development potential in the more backward areas, since these effects are so difficult to measure. A proper balance has to be struck between encouraging new development in hitherto neglected areas and at the same time providing the absolutely essential improvements in pavements of roads in those developed areas on which immediate economic growth is based. It would be wrong not to improve the infrastructure of the more developed areas further; a balance between creating new roads and improving present capacity must be struck even if rather arbitrarily.

14. Under conditions of severe financial constraint for the total road development expenditure more consideration will be given to the expansion of the *road capacity* of the country as compared to the *improvement of existing facilities*. This means that preference is given in some cases to the construction of completely new roads over bitumenization of existing roads.

15. Before the Three-Year Development Plan (1961–64) it was the policy of Government to build up the main road system to an all-weather standard and to attend to feeder road improvement on a strictly limited scale. In the First Five-Year Development Plan it was intended that the expenditure on feeder roads should be proportionately increased with respect to the expenditure on main roads. However, during the First Five-Year Plan there was still a need to improve the existing trunk road network to genuine all weather standard and this remains true for the Second Five-Year Plan period. Although the feeder road programme is expanding, total spending on roads is still dominated by trunk roads expenditure.

B. *Achievements of the First Five-Year Plan.*

Trunk Roads.

16. It was envisaged in the First Five-Year Plan that about Shs. 122 million should be spent on trunk and major link roads; this was to be 44 per cent of the total envisaged raod programme. About Shs. 185 million was actually spent during

he First Plan period (55 per cent of the total road programme). The Total expenditure on roads during the first period was about Shs. 60 million higher than planned (Shs. 337 million compared with Shs. 277 million). The extra finance vent entirely into trunk roads. The most important development on the trunk oute network was the bitumenization of the two remaining gaps of the Dar es Salaam-Moshi-Arusha-Kenya border road (i.e. Chalinze-Segera and Mkumbara-Kisangiro). The Mtwara-Mingoyo-Masasi Road in the South was improved to engineered gravel standard and Songea-Njombe mountain section was partially mproved. In addition, several smaller improvements on different sections of the otal network were executed, such as Dar es Salaam-Kibiti and Uyole-Itungi Port.

Feeder Roads.

i) *Major Feeder Roads.*

17. About Shs. 108 million was to be spent during the First Plan period on najor feeder roads. In financial terms this figure will nearly be reached. t is expected that about Shs. 102 million will be spent by the end of the Plan eriod (30 per cent of total road programme). But in physical terms, as with the runk route programme, only part of the envisaged programme was executed. The nain roads built or improved during the plan period were:

Uyole-Itungi Port (bitumen).
Kolondoto-Bariadi (engineered gravel).
Bunda-Nansio (engineered gravel).

even projects that were listed in the First Five Year Plan were not implemented. ome of these re-appear in the present Plan.

18. In the Second Plan period this category of major feeder roads will receive ess emphasis than in the last Plan. The Geita Cotton Road projects not carried ut during the First Plan are included in the Second Plan (part of the Geita Cotton Road programme consists of minor feeder roads). The Msolwa-Ifakara road will e constructed to engineered gravel standard and the Lusahanga-Ngara-Rwanda Border road is scheduled for structural improvements.

TABLE I

DEVELOPMENT EXPENDITURE ON ROADS DURING THE FIRST FIVE YEAR PLAN

Year	Total Road Expenditure	Trunk Roads + Major Link Road		Major Feeder Roads		Minor Feeder Roads		Miscellaneous	
			%		%		%		%
Actual Expenditure									
1964/65	23,214,000	9,445,000	41	2,065,000	9	9,630,800	42	2,072,600	9
1965/66	28,963,900	9,285,000	32	6,395,200	22	10,887,600	38	2,396,100	8
1966/67	73,362,000	47,277,300	64	20,059,100	27	2,051,400	3	3,974,200	6
Budget Estimates									
1967/68	89,814,500	43,609,400	49	38,683,900	43	1,000,000	1	6,521,200	8
1968/69	121,985,300	75,611,200	62	34,566,400	28	3,200,000	25	8,607,700	8
Plan Total ...	337,339,700	185,227,900	55	101,770,200	30	26,769,800	8	23,571,800	7
Original Plan Estimates Five Year Plan + Three Year Plan carry-over	277,240,000	121,548,000	44	108,252,000	39	30,400,000	11	17,040,000	6

(ii) *Minor Feed Roads.*

19. About Shs. 30 million (11 per cent of total road programme) was to be spent in the First Plan on this category of roads. The actual financial expenditure of Shs. 27 million very nearly reaches this target and accounts for 8 per cent of the actual plan road expenditure. During the Second Plan more emphasis will be placed on worthy projects in this category.

In addition to the Sh. 25 million set aside for feeder roads the whole of the equipment allocation for the takeover of District Roads (Shs. 20 million) will be spent on minor feeder roads. Another Shs. 16 million of the rest of the road programme are minor/feeder road works. This makes a Second Plan total of Shs. 61 million.

C. *Trunk Route Strategy.*

(i) *Long-run concept for major road network.*

20. The Government's long term programme for the construction of major roads has been to establish a main network of trunk routes with a grid of roads running from North to South and from East to West. In the past the concept of this grid consisted of 3 North-South and 3 East-West roads. In the light of the increasing importance of the road link with Zambia and the planned re-location of economic activity the main trunk system in the future will be thought of in terms of 4 East-West roads and 3 North-South roads as follows: —

North-South.

T. 1: Kenya Border-Tanga-Segera-Chalinze-Mtwara (between Chalinze and Mtwara there are 2 alternatives, either via Stiegler's Gorge-Nachingwea-Nanganga-Mingoyo or via Dar es Salaam-Kibiti-Mohoro-Lindi—See later detailed discussion of Southern link road).

T. 2: Kenya Border (Namanga)-Arusha-Makuyuni-Babati-Dodoma-Iringa.

T. 3: Uganda Border - Bukoba - Biharamulo - Nyakamasi - Kasulu - Mpanda-Sumbawanga-Tunduma.

East-West.

T. 4: Segera - Korogwe - Moshi - Arusha - Makuyuni - Maswa - Mwanza-Usagara-Geita-Biharamulo-Rwanda Border.

T. 5: Morogoro-Dodoma-Singida-Nzega-Shinyanga-Usagara-Mwanza.

T. 6: Dar es Salaam-Chalinze-Morogoro-Iringa-Makumba-Mbeya-Tunduma.

T. 7: Mtwara-Masasi-Tunduru-Songea-Njombe-Makumbako.

This network was derived from an examination of economic statistics district by district. The trunk routes try to serve "corridors" of economic activity and link "clusters". Where possible a link between two "clusters" services a "corridor". This is shown on the following maps.

21. The general alignment of this national trunk road netwok is now virtually established, with the exceptions of the Southern Link between Dar es Salaam and Mtwara and of the Arusha-Mwanza link.

22. In addition the following major link roads are intended to connect important centres of economic activity with the main trunk road network:

(ii) *Major Link Roads.*

(a) Kenya Border-Tarime-Nyakanga (Musoma turn off)-Nassa.
(b) Nzega-Tabora.
(c) Babati-Singida.
(d) Kasulu-Kigoma-Burundi Border.
(e) Mikumi-Ifakara.

Possible Future Development of Trunk Network.

23. The most significant addition to the trunk route network during Second Plan will be the bitumenization of the full length of the TanZam High The Second Plan programme also incorporates the bitumenization of the follo sections of the trunk route network:

(a) Shinyanga-Mwanza.

(b) Bukoba-Kyaka.

(c) Makuyuni-Oldeani.

(d) Mtwara-Mingoyo-Masasi.

Further a new road link to engineered gravel standard will be establis between Oldeani and Nassa, and an investigation of the link Kibiti to Lindi car out.

24. To give concrete substance to the notion of a trunk grid network i of some interest to try to estimate the total cost and timing of a programme bitumenization of the entire trunk route network in the country. The c estimates used are based on present day average costs. There remains a gra total of about Shs. 1,870/- million of investment in additon to the Second F programme to bitumenize all remaining trunk roads. This would probably t until 1990, assuming that the real resources allocated to trunk road construct expand at about the same rate as the projected growth of the economy. following map.

D. *Programme Summary: Roads and Airports.*

25. The Roads and Aerodromes programme during the Second Five Y Plan has the following features:

(i) The construction of the TanZam Highway over-shadows all ot developments in the sector, particularly during the first three years the Plan.

(ii) Because of the heavy impact of TanZam spending the level spending on other communications projects will be less than wou otherwise have been desirable.

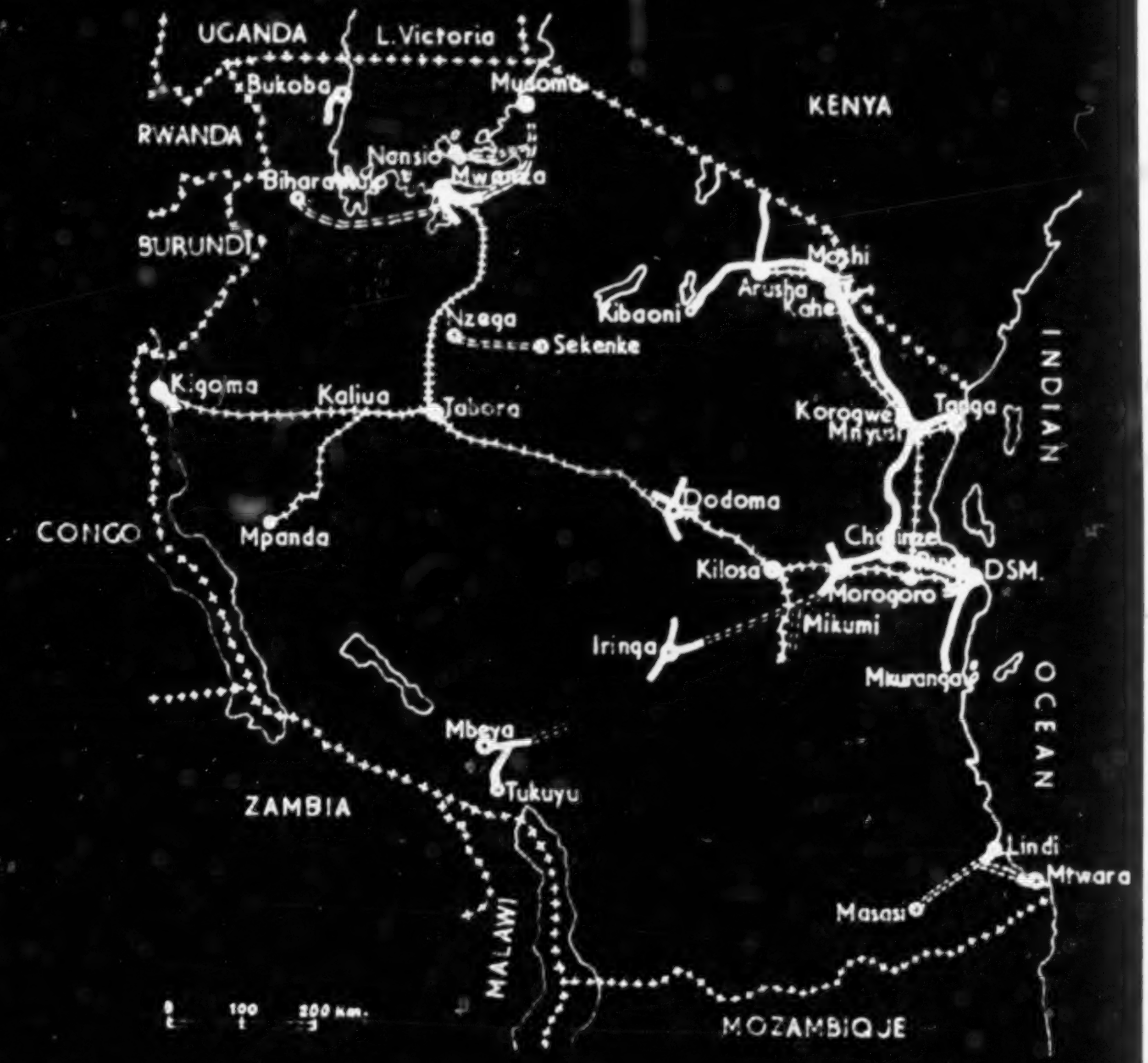
(iii) The main trunk route network still needs attention as traffic increas Genuine all-weather standards should be achieved for all trunk roa

(iv) Some major feeder roads will be improved, but increased emphasis to be given to minor feeder roads wherever agricultural potential c be shown and identified.

(v) A list of all desired and economically feasible projects in the sect of roads and aerodromes adds up to a total expenditure of Sh 1,182 million. This sum would account for about 43 per cent of t total Second Plan Budget. All these projects would be justified economic grounds. Difficult choices have therefore had to be mad delaying a number of feasible projects to the Third Plan.

Roads and Aerodromes Programme for Implementation during the Second Pla

26. A programme of projects with highest priority has been drawn up f implementation during the period of the Second Five Year Plan.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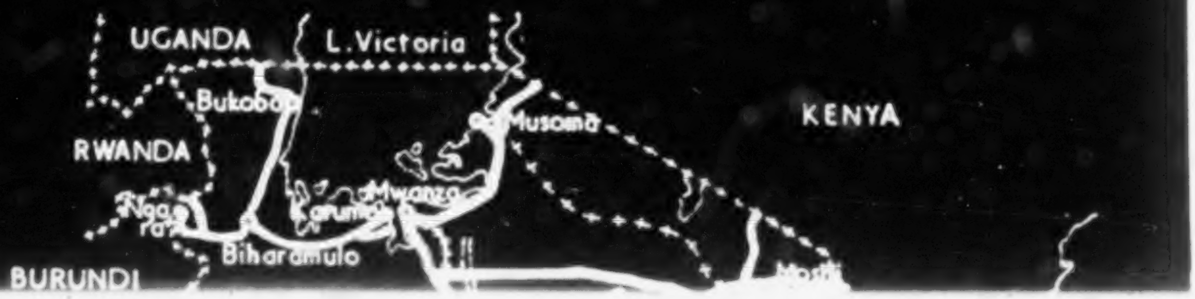
Kibaoni
Nzega
Sekenke
INDIAN
Kigoma
Kaliua
Tabora
Korogwe
Mnyusi
Tanga
Dodoma
CONGO
Mpanda
Chalinze
Kilosa
DSM.
Morogoro
Mikumi
Iringa
Mkuranga
OCEAN
Mbeya
Tukuyu
ZAMBIA
Lindi
Mtwara
Masasi
MALAWI
0
100
200 km.
MOZAMBIQUE

ROAD NETWORK AT BEGINNING OF SECOND FIVE YEAR PLAN 1969

Bitumen road existing.
Engineered gravel road existing.
Railway
Town or Minorsettlement.
Territorial boundary.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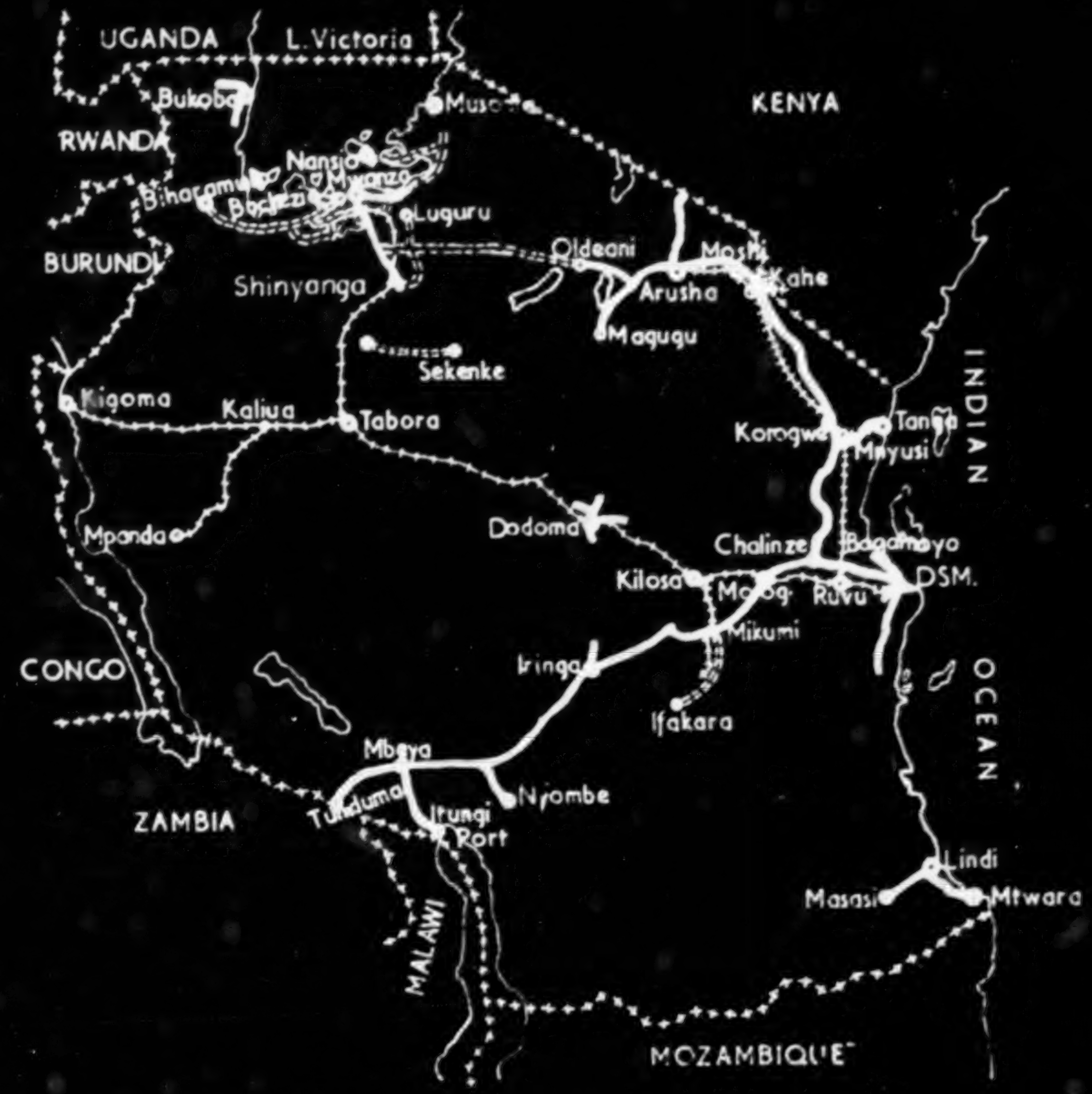
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Bochezi
Luguru
BURUNDI
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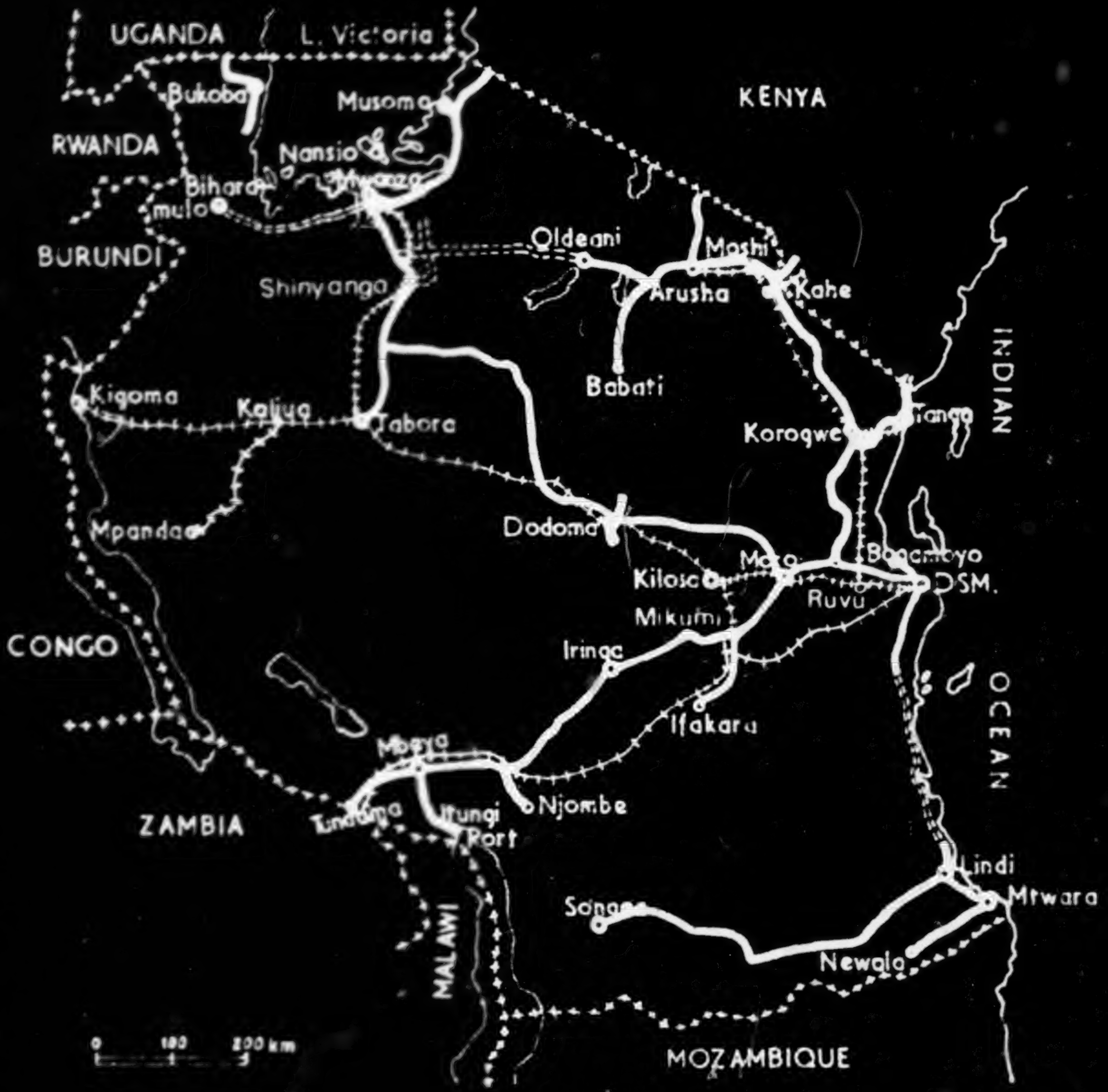
Oldeani
Moshi
Arusha
Kahe
Maququ
Sekenke
Kigoma
Kaliua
Tabora
Tanga
Korogwe
Muyusi
INDIAN
Mpanda
Dodoma
Chalinze
Bagamoyo
Kilosa
Morog.
Ruvu
DSM.
Mikumi
CONGO
Iringa
OCEAN
Ifakara
Mbeya
Tunduma
Njombe
Itungi
Port
ZAMBIA
Lindi
Masasi
Mtwara
MALAWI
MOZAMBIQUE

ROAD NETWORK AT END OF SECOND FIVE YEAR PLAN 1974

Bitumen road existing
Engineered gravel road existing
Railway
Town or Minorsettlement
Territorial boundary

UGANDA
L. Victoria
Bukoba
KENYA
Musoma
RWANDA
Ngara
Mwanza
Biharamulo
BURUNDI
Moshi
Shinyanga
Arusha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Shinyanga
Babati
INDIAN
Kigoma
Kaliua
Tabora
Korogwe
Tanga
Dodoma
Mpanda
Bagamoyo
Kilosa
Morogoro
DSM.
Ruvu
Mikumi
CONGO
Iringa
OCEAN
Ifakara
Mbeya
Njombe
ZAMBIA
Tunduma
Itungi Port
Lindi
Mtwara
Songea
MALAWI
Newala
0
100
200 km
MOZAMBIQUE

POSSIBLE PHASE 1 FOLLOWING SECOND FIVE YEAR PLAN

BITUMEN road

Engineered gravel road

Railway

Town or Minorsettlement.

Territorial Boundary

BEGINNING OF SECOND FIVE YEAR PLAN 1969

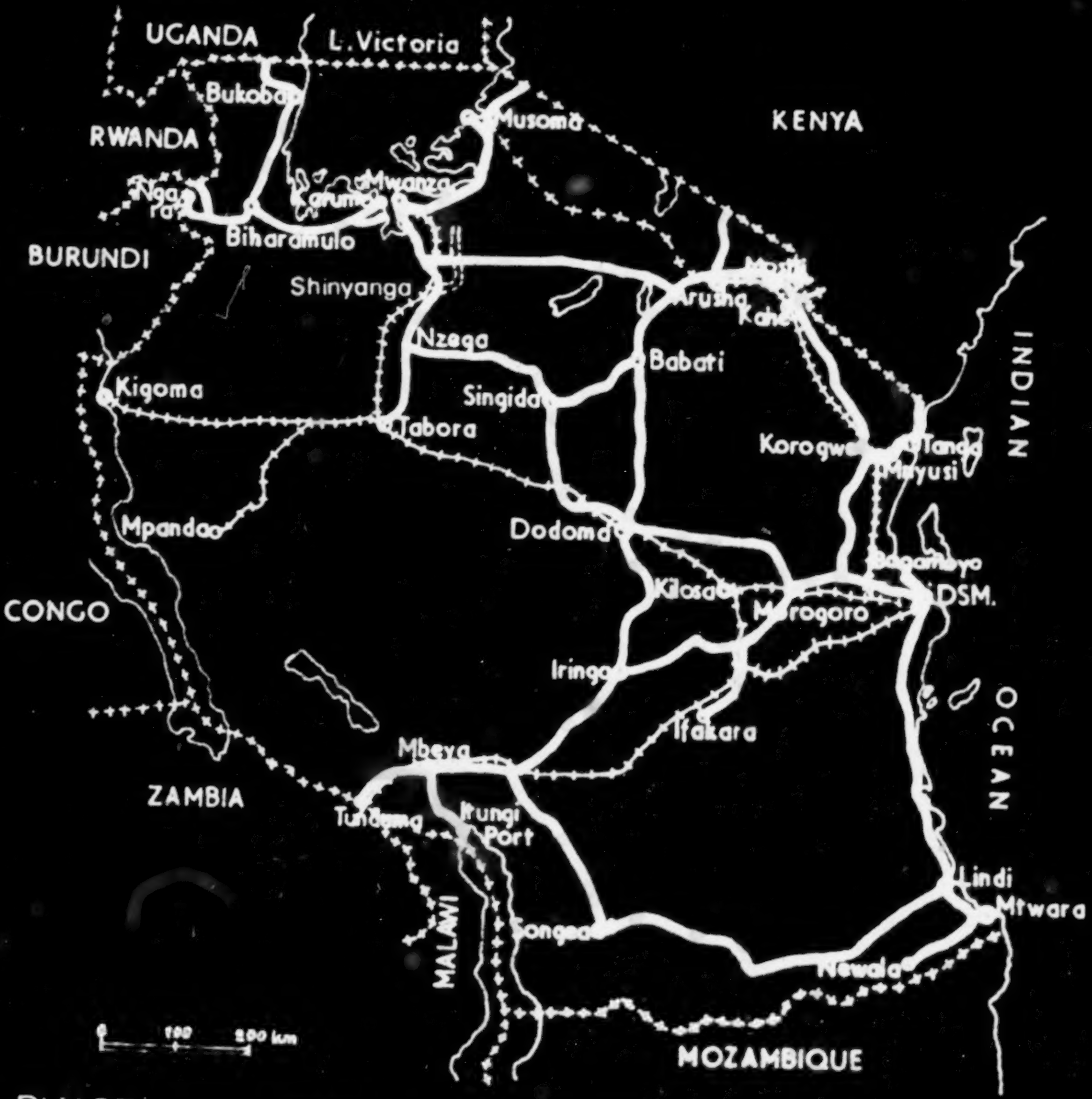
Bitumen road existing.

Engineered gravel road existing.

Railway.

Town or Minorsettlement.

Territorial boundary.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ZAMBIA
Tunduma
Itungi Port
Lindi
Mtwara
Songea
MALAWI
Newala
0
100
200 km
MOZAMBIQUE

POSSIBLE PHASE II FOLLOWING SECOND FIVE YEAR PLAN

Bitumen road existing.

Railway existing.

Railway proposed. (Arusha – Musoma)

ROAD NETWORK AT END OF SECOND FIVE YEAR PLAN 1974

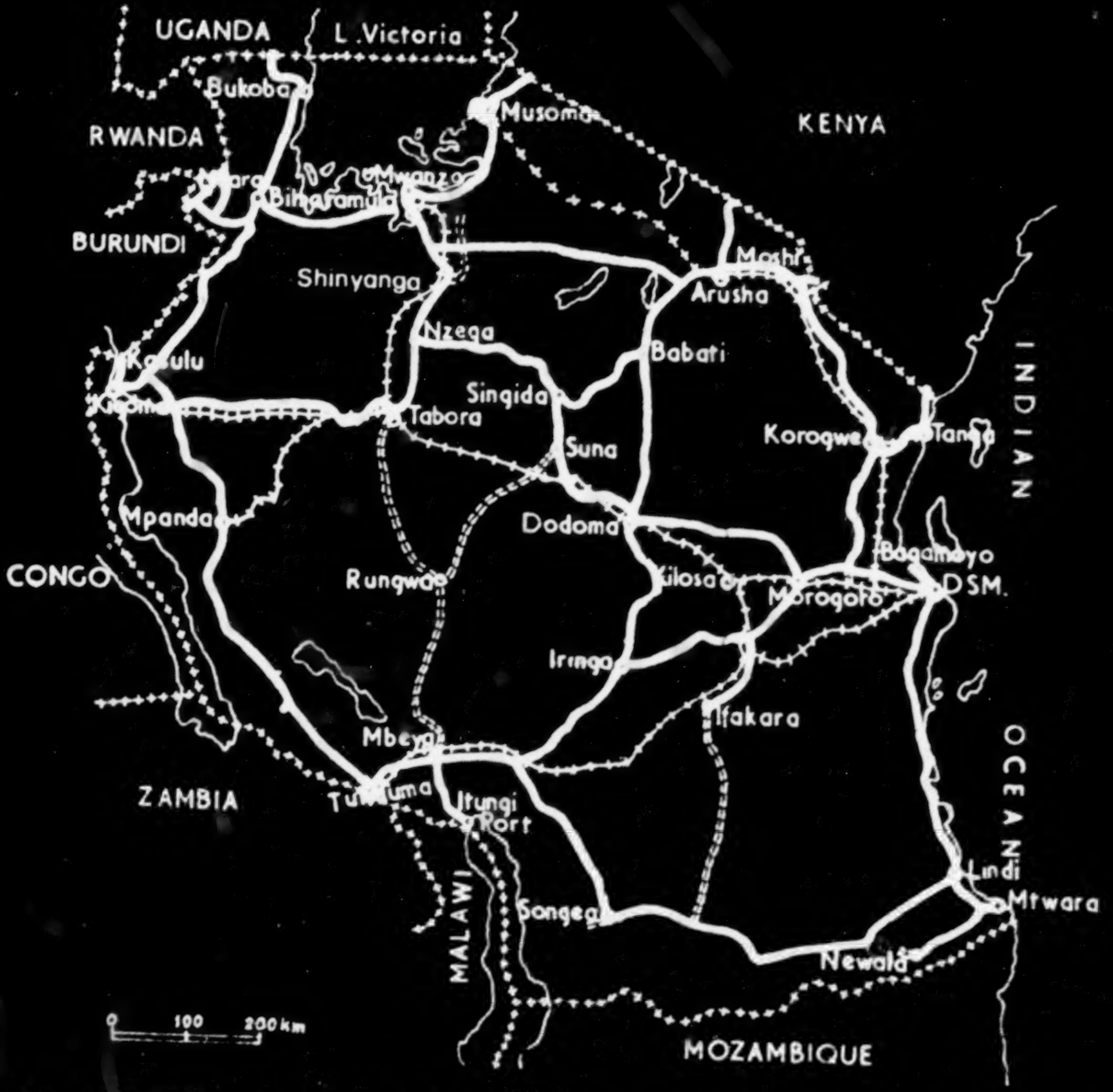
Bitumen road existing

Engineered gravel road existing

Railway

Town or Minorsettlement

Territorial boundary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MALAWI
Songea
Newala
0 100 200 km
MOZAMBIQUE

POSSIBLE PHASE III FOLLOWING SECOND FIVE YEAR PLAN

Bitumen road.

Road to be improved

Railway existing.

Railway proposed (Arusha – Musoma).

ROAD NETWORK AT END OF SECOND FIVE YEAR PLAN 1974

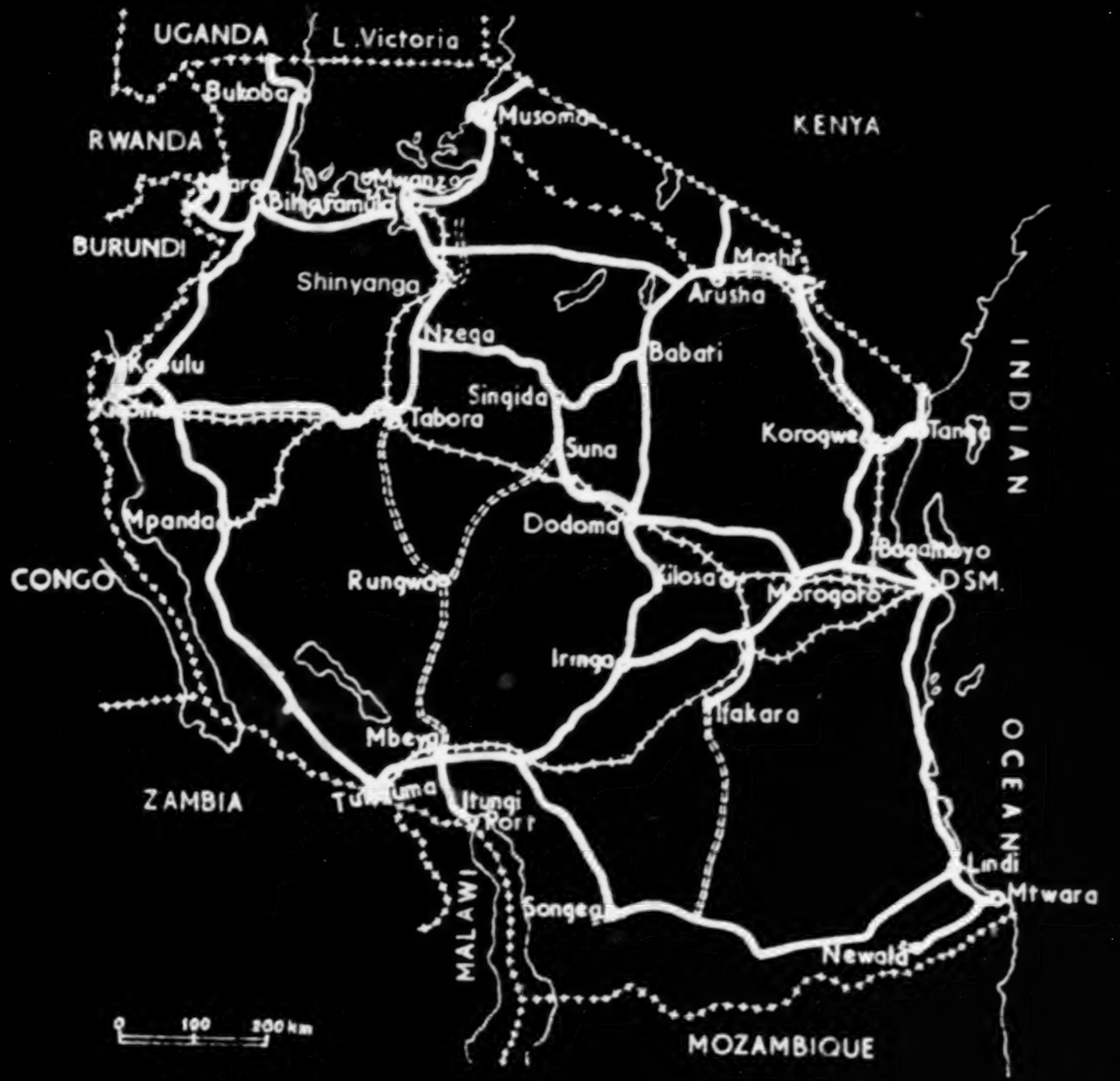
Bitumen road existing.

Engineered gravel road existing

Railway

Town or Minorsettlement

Territorial boundary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ZAMBIA
Tunduma
Itungi Port
Lindi
Mtwara
Songea
MALAWI
Newala
0
100
200 km
MOZAMBIQUE

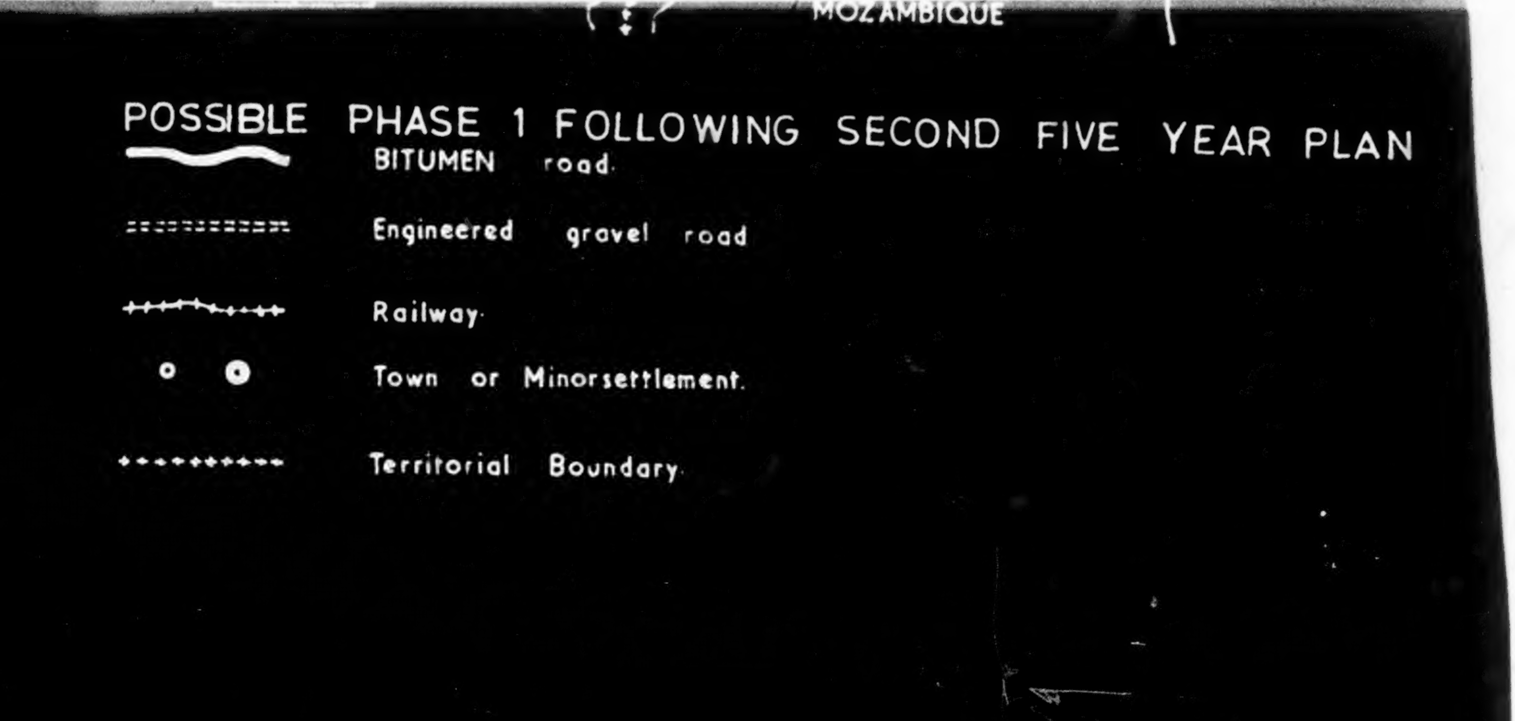
POSSIBLE PHASE III FOLLOWING SECOND FIVE YEAR PLAN

Bitumen road.

Road to be improved

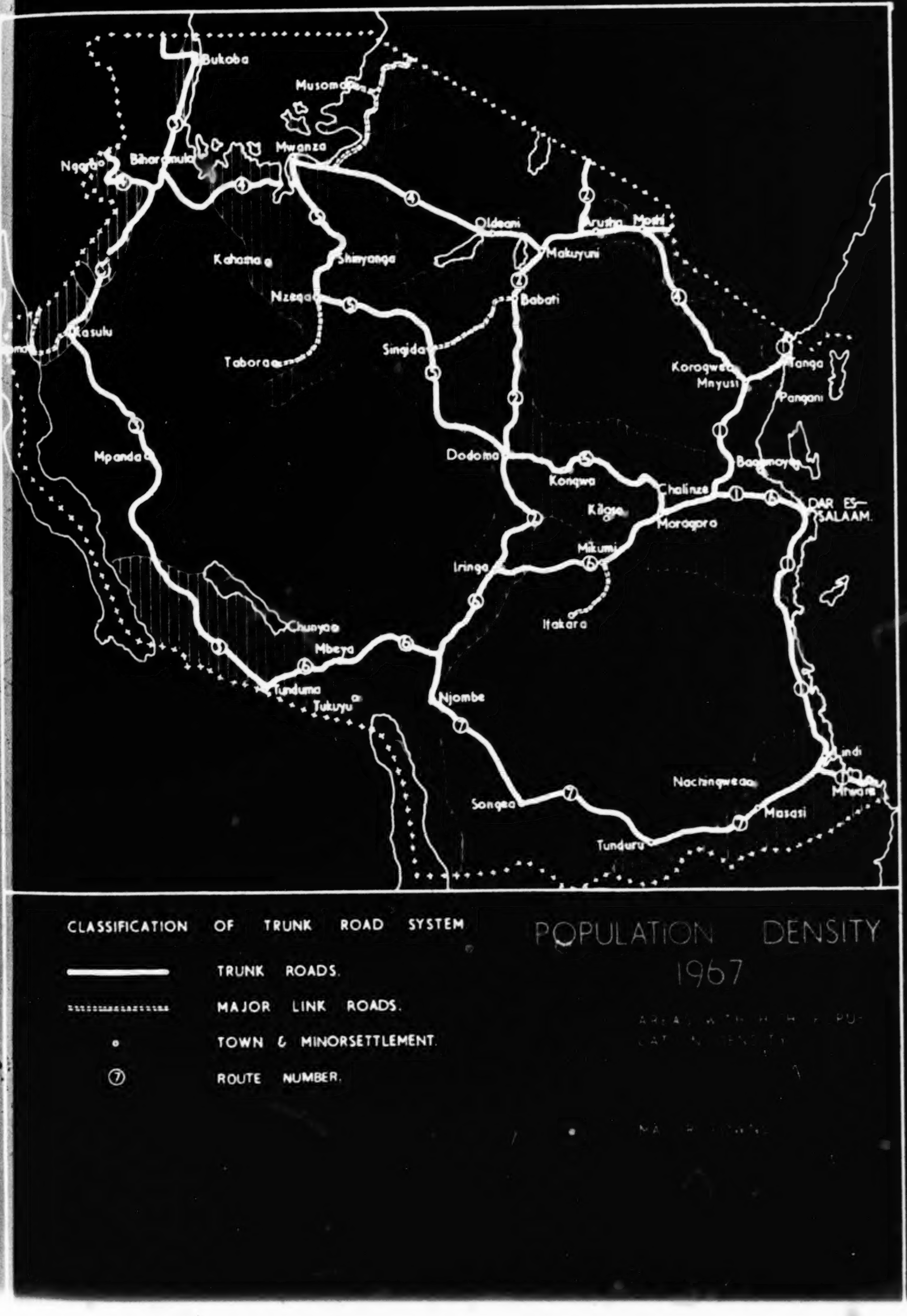
Railway existing.

Railway proposed (Arusha – Musoma).


MOZAMBIQUE
POSSIBLE PHASE 1 FOLLOWING SECOND FIVE YEAR PLAN
BITUMEN road.
Engineered gravel road
Railway.
Town or Minorsettlement.
Territorial Boundary.

POSSIBLE DEVELOPMENT OF A BITUMENISED TRUNK ROUTE NETWORK BY 1990

(Subject to periodic planning revisions)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Makuyuni
Babati
Singida
Korogwe
Mnyusi
Tanga
Pangani
Bagamoyo
Dodoma
Kongwa
Chalinze
Kilosa
Morogoro
DAR ES SALAAM.
Mikumi
Iringa
Itakara
Chunya
Mbeya
Tunduma
Tukuyu
Njombe
Songea
Tunduru
Nachingwea
Masasi
Lindi
Mtwara
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7
CLASSIFICATION OF TRUNK ROAD SYSTEM
TRUNK ROADS.
MAJOR LINK ROADS.
TOWN & MINORSETTLEMENT.
⑦ ROUTE NUMBER.
POPULATION DENSITY 1967
AREAS WITH HIGH POPULATION DENSITY
MAJOR TOWNS

		Shillings
A. TanZam Road		394,000,000
B. Construction of trunk and major feeder roads		238,971,000
Usagara-Shinyanga 88 miles (bitumen)	40,700,000	
Makuyuni-Oldeani 45 miles (bitumen)	20,000,000	
Bukoba-Kyaka 30 miles (bitumen)	10,645,000	
Geita Peninsula Cotton Roads	50,200,000	
Dar es Salaam-Bagamoyo 20 miles (bitumen)	10,870,000	
Mtwara-Mingoyo-Masasi 126 miles (bitumen)	27,256,000	
Msolwa-Ifakara 47 miles (engineered gravel)	16,000,000	
Oldeani-Nassa (Arusha-Mwanza) 200 miles (engineered gravel)	56,800,000	
Liganga Mine Access Road	6,500,000	
	238,971,000	
C. Structural and pavement improvements to trunk and major feeder roads		16,100,000
Masasi-Tunduru-Songea (282 miles)	5,600,000	
Lusahunga-Ngara-Rwanda (100 miles)	5,000,000	
Bukoba-Mulemba-Biharamulo (100 miles)	2,000,000	
Uvinza-Mpanda (125 miles)	500,000	
Tunduma-Sumbawanga (145 miles)	3,000,000	
	16,100,000	
D. Betterment units		10,000,000
E. Additional plant or normal maintenance		10,000,000
F. Extra equipment for phased takeover of District Roads		20,000,000
G. Minor feeder roads		25,000,000
H. Main roads in townships		5,000,000
I. Emergency bridging		3,000,000
J. Surveys and Investigations		3,000,000
K. Staffing and Training		2,900,000
L. Carry-over from present plan		57,450,000
TOTAL ROADS A–K		785,421,000
M. Airports		81,400,000
Kilimanjaro International Airport	70,000,000	
Dar es Salaam interim improvements	6,400,000	
Other small aerodromes	5,000,000	
	81,400,000	
N. AFS equipment, crash tenders and buildings		5,800,000
TOTAL AERODROMES L–M		87,200,000
O. Improved coastal shipping service Dar es Salaam-Mtwara (Include an element for survey of coastal road Kibiti-Lindi)		10,000,000
GRAND TOTAL ROADS AND AERODROMES		882,621,000

Feasible projects that are not included in the Programme as a result of overall financial constraints.

Under B. Construction of trunk and major feeder roads:

Makuyuni-Babati (bitumen).
Tanga-Moa (bitumen).
Nzega-Shinyanga (bitumen).
Nyanguge-Nassa (bitumen).
Mombo-Lushoto (bitumen).
Bukoba-Mulemba (bitumen).
Njombe-Makumbako (bitumen).
Magu-Bukwimba (engineered gravel).

Under C. Structural improvements:

Singida-Sekenke.
Morogoro-Dodoma-Singida.
Babati-Dodoma.
Songea-Njombe.

E. *Programme Explanation.*

Southern Strategies.

27. In the past the Southern part of the country has been least developed from a transport point of view, enjoying neither rail nor first-class road connections with the rest of the country. In this Plan, a dramatic change in this situation will be achieved, with the completion of a first class bitumenized road from Dar es Salaam to Tunduma, and the implementation of a substantial part of the Tanzania–Zambia Railway. Through these two projects communications to the Southern Highlands will be transformed, vastly increasing the development prospects of the whole southern half of the country.

28. However, in Ruvuma and Mtwara regions transport facilities are also considerably under-developed. Three separate problems can be identified:

(i) Linking Dar es Salaam with Mtwara;
(ii) Development of service roads around Mtwara;
(iii) Ending the isolation of Songea.

(i) *Dar es Salaam-Mtwara Link.*

29. With the massive allocation of resources to the development of the Tanzania–Zambia road and rail links, it will not be possible during this Plan period to build a new trunk road from Dar es Salaam to Mtwara. The existing proposal for the Southern Link Road would involve an expenditure of Shs. 210,000,000 (and that only for an earth road).

30. Because of this unavoidable delay it is the Government's intention to improve communications to Mtwara through public investment in the improvement of the coastal shipping service between Dar es Salaam and Mtwara. A sum of Shs. 10,000,000 has been allocated for this purpose in the financing of the Plan, pending more detailed estimates.

31. In the time provided by the delay in implementing the Link Road, the Government will be able to give further consideration to the optimum location of the route—the choice is between following the existing coast road (with the considerable problem of crossing the Rufiji flood plain) and a proposed inland route, via Chalinze and Stiegler's Gorge (which avoids the Rufiji problem but which serves much less populated areas).

(ii) *Servicing Mtwara.*

32. Consultants have recently completed a report recommending the bitumenization of the Mtwara-Mingoyo-Masasi and Mtwara-Newala roads.

33. Mtwara-Mingoyo-Masasi was recently raised to an engineered gravel standard, but because of the poor quality of the gravels in the area the road becomes difficult during the rainy season when the heaviest yearly traffic occurs because of the cashew crop movement. This road is therefore to be bitumenized.

34. The Newala-Mtwara link is at present open all year but passage is difficult as the road is build on sand. It is considered to have less priority than the above as most of the area is adequately serviced by a link to the former road. This development will, therefore, be left until the Third Plan.

(iii) *Songea.*

35. It has long been believed that the agricultural potential of this part of Ruvuma Region has been considerably retarded because of poor communications. Songea could be linked northwards to Njombe some 167 miles, and thence to the great North Road and access to Dar es Salaam and Zambia. This connection could only be achieved at great cost because of the difficult terrain.

36. While this road will eventually be constructed, in the short-run a sensible and more economical alternative will be to structurally improve the Songea-Tunduru-Masasi link of some 282 miles. This will link Songea to the sea at Mtwara where considerable unused capacity exists, rather than adding more strain to Dar es Salaam port. The road will be considerably cheaper to improve, will serve the whole area and develop the Mtwara hinterland. Provision for structural improvement of the Masasi-Tunduru-Songea road has therefore been made in the Plan.

Northern Strategies.

37. Mwanza and Shinyanga have been the fastest growing regions during the First Plan and therefore have made considerable demands for transport investment in up-grading existing roads, because of heavy existing traffic levels.

38. Secondly, Arusha is the fastest growing urban centre in the country and consideration must be given to linking it directly with the major growth centre of Mwanza.

(i) *Serving Mwanza and Shinyanga.*

39. Finance is being secured to undertake the engineering design of roads to service cotton growing areas presently under-equipped with all weather roads. These roads were the subject of a feasibility study that found them justified in terms of operating savings to present road users and development effects from improved access.

40. The bitumenization of the Shinyanga-Usagara road is included in the Plan, because the heavy traffic using the road means that there will be substantial benefits from up-grading.

(ii) *Servicing Arusha Region.*

41. In Arusha Region the Makuyuni-Oldeani road is to be up-graded because of present traffic levels. The Makuyuni-Babati road would justify similar treatment but scarcity of resources demands a delay to the Third Plan.

(iii) *Linking Mwanza and Arusha.*

42. At present the two centres are linked by a U-shaped route Arusha-Babati-Singida-Nzega-Shinyanga-Mwanza of 540 miles (86 miles are bitumen, 79 miles engineered gravel and the remaining 375 miles are earth). This route services the main population corridors of Mwanza, Shinyanga, Singida and Arusha regions.

43. The direct link across the Serengeti will be some 363 miles comprised at present of 71 miles of bitumen, 45 miles of engineered gravel, 121 miles of earth with a missing link of 126 miles.

44. The choice is, therefore, between a route 177 miles longer that passes through rather heavily populated areas and the direct link which substantially reduces the distance between the two centres. The direct link will be implemented in this Plan, both because of the considerable vehicle operating savings and because of the immediate economic benefits to be derived from easy communications between Tanzania's two fastest growing areas. The U-shaped route will remain in service and be improved in the Third Plan.

Up-grading of other major roads.

45. The following projects have been included in the programme: —

Bukoba-Kyaka Ferry (bitumenization). This road to the Uganda Border presently carries 178 vehicles per day ...	Shs. 10·6 m.
Dar es Salaam-Bagamoyo (bitumenization). This road links the historic town of Bagamoyo to the capital and should generate a great deal of tourist traffic	Shs. 10·9 m.
Msolwa-Ifakara (engineered gravel). This is an important development road for opening up the Kilombero Valley. Present traffic 85 vehicles per day	Shs. 7·6 m.

Structural and Pavement Improvement.

46. Under this head isolated work schems are included such as earth works, gravelling, drainage, bridging, bitumenizing escarpments, etc. The intention is to make those basic structural investments that will permit the road to be of a passable standard all year round.

47. A programme of identifying specific problem areas and expending funds to meet those problems will, if successful, allow a much more differentiated expenditure programme than the present practise of bitumenizing or gravelling sections of 50–100 miles.

48. If a programme of structural improvements can be carried out by the proposed Betterment Units then the returns to such investments will normally be extremely high. An expenditure of 20,000 shillings per mile has been allocated.

Road sections planned for structural improvements.

Lusahunga-Ngara-Rwanda Link.

49. This road has at present very low traffic levels (about 13 average daily traffic (ADT) at Lusahunga turn-off and about 25 (ADT) at Ngara) and only limited growth prospects. A past feasibility study of the Rwanda Road Link estimated the Rwanda traffic after the completion of the Tanzania-Rwanda Link at 6 vehicles per day in the first year and about 30 after 20 years.

50. No major reconstruction of road can be justified on these low traffic levels but because the area is isolated (it is the only district in Tanzania that suffered an inter-censal decline in population) some improvement is urgent. An average of Shs. 20,000 per mile is to be spent for structural improvements on the 80 miles between Lusahunga and Ngara and Shs. 40,000

per mile on improvement of the 20 miles between Rulenge and the turn-off of the new Rwanda link at Kasherazi, resulting in a total expenditure of Shs. 2·4 million. The main bottleneck for the reliable all-weather connection of Ngara with the rest of the country is the Mumwembo ferry across the Ruvubu River, closed to heavy vehicles during the wet season. A new bridge is urgently required which is estimated to cost about Shs. 2·5 million. A total expenditure of about Shs. 5 million will provide all-weather access to the Ngara District and the new Rwanda Link Road.

Bukoba-Mulemba-Biharamulo.

51. This 100 miles will complete the Bukoba-Mwanza road link. The Lake ferry services cater for most of the trade between the two centres, but an improved road connection will service areas now cut off from the Lake Ports.

Uvinza-Mpanda.

52. This road is 125 miles, presently in reasonable condition, but needing some improvement. Consideration may also have to be given during the Plan to linking Tabora-Mpanda.

Tunduru-Sumbawanga.

53. Further work is required to make this road suitable for the expected wheat shipments. Further, in connection with the transport of wheat to the North an investigation will shortly be undertaken to consider improving the road Sumbawanga-Mpanda and comparing these costs with linking Sumbawanga to Lake Tanganyika and thence by barge to Kigoma.

Feeder Roads.

54. Consultants are undertaking a study of 1,000 miles of feeder and penetration roads listed below.

55. In addition to these efforts the District and Regional Planning Committees are producing priority lists for feeder roads, that in some cases are extremely well prepared. The Devplan Regional Planning team together with the regional economic secretaries will aid in the evaluation of these projects, selecting some 500 miles in the Second Plan period. From a total of 1,500 miles of evaluated roads it is intended that 1,000 miles of new feeder roads will be selected for construction, at Shs. 25,000 per mile.

56. The following procedure will be adopted for the Central Government's Feeder Road programme:—

(a) The Central Government will allocate funds in the Development Budget for feeder roads.

(b) The Regional Development Committees will prepare project lists with the help of the Regional Engineers, Agricultural Officers, and Economic Secretaries.

(c) The Inter-Ministerial Road Committee will then allocate the available sum region by region, in accordance with agricultural and regional planning priorities.

In addition each region will implement many of its own feeder road projects out of finance from the Regional Development Fund.

MINOR FEEDER ROADS AND PENETRATION ROADS UNDER STUDY AT PRESENT

	Miles
Rungwe District:	
Mwakaleli Road	30
Lwangwa Road	20
Ipinda-Makwala-Matema	18
Kyela-Katumba	5
Segera-Ipinda	20
S. W. Penetration Road	80
Njombe District:	
Njombe-Lupembe	25
Njombe-Tandala & N. W. Penetration	40
Lusito-Milo & S. W. Penetration	30
Igawa-Rujewa-Madibira	50
North Mara District:	
Shirati Penetration	30
Bugire Penetration	15
Ochuma Penetration	40
Musoma District:	
Maji Moto-Mara River Penetration	14
Simba Sirori-Mugeta	15
Mugango-Bukimba	28
Mrangi-Nyabaingere	5
Mbulu District:	
Bahati Road-Basotu	26
Rotia-Mbulumbulu-Kitete	18
Gendi-Galappo-Kikore	12
GNR*-Madege-Galappo	10
GNR-Magara-Mbulu	22
Maghan-Dongobesh-Mbulu	40
Morogoro District:	
Dutumi-Kolera	13
Mageta-Bunduki	8
Lukosi-Kwaba	13
Ngerengere-Magogoni-Mvuha	46
Lushoto District:	
Mgamba-Mlalo	20
Bumbuli-Korogwe	25
Malindi-Mtae	15
Magamba-Mlola	20
Gare Road	10
Mnazi-Mkomazi	30
Korogwe-Kwata	30
Lukosi-Mtae	25
Soni-Bumbuli	12

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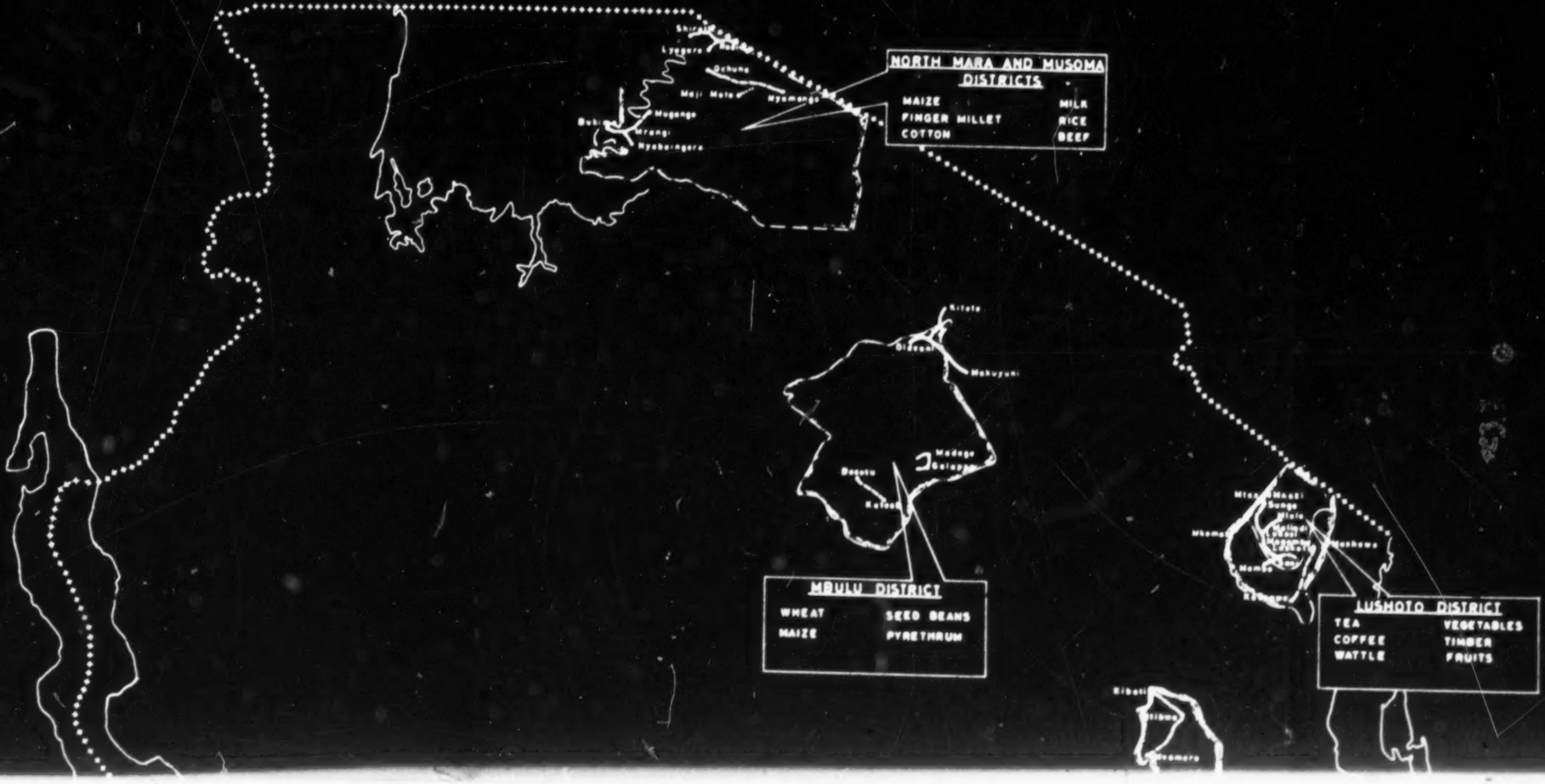
*GNR is Great North Road

FEEDER ROAD STUDY


Shirati
Lyegoro
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Maji Moto
Nyamongo
Mugango
Bukima
Mrangi
Nyabaingere
Kilefu
Dareni
Makuyuni
Madege
Gelapi
Basotu
Katesh
Mlalo
Mbomai
Malindi
Mashewa
Mombo
Korogwe
Kibeti
Kilima
Msomera

NORTH MARA AND MUSOMA DISTRICTS

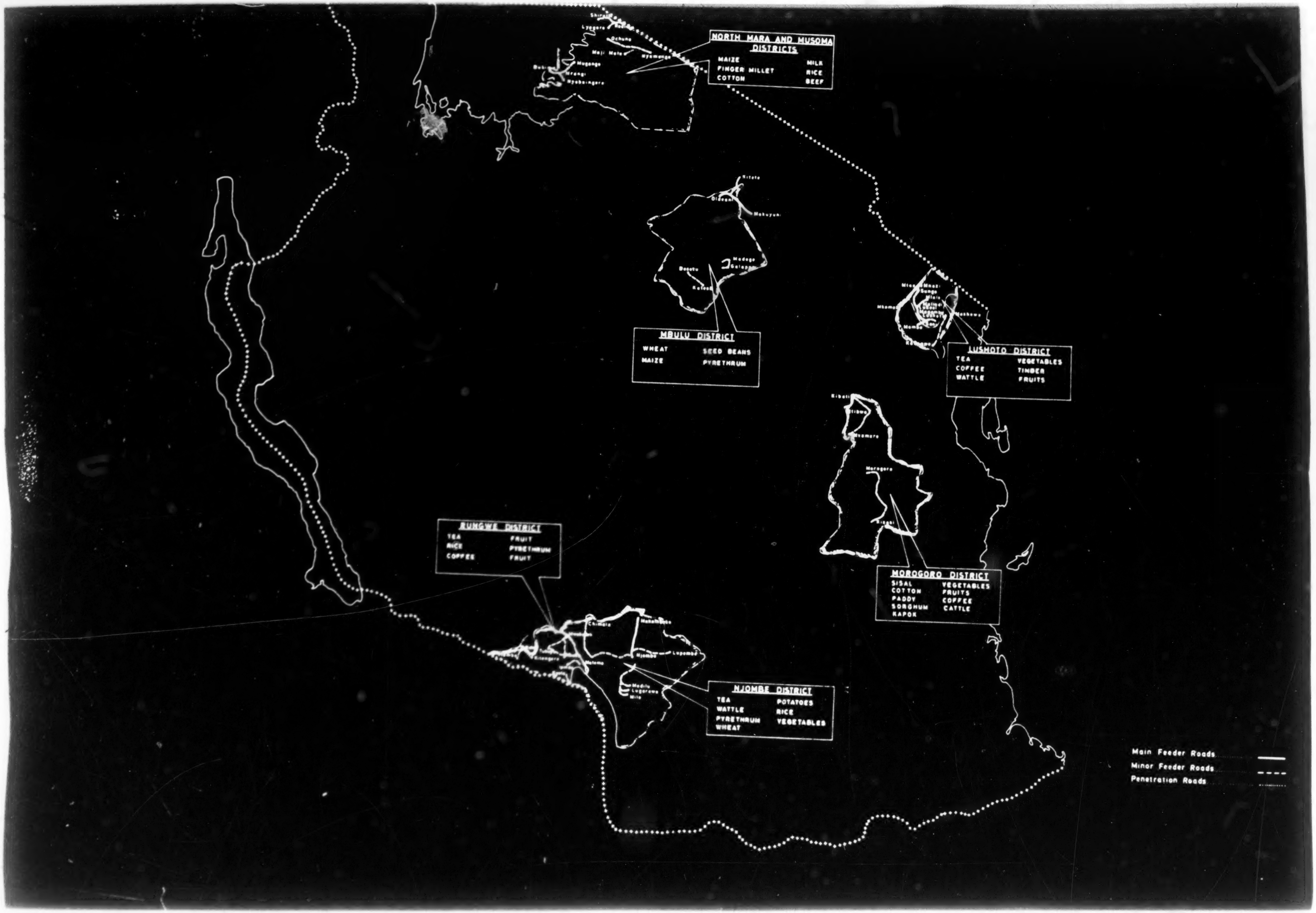
MAIZE	MILK
FINGER MILLET	RICE
COTTON	BEEF

MBULU DISTRICT

WHEAT	SEED BEANS
MAIZE	PYRETHRUM

LUSHOTO DISTRICT

TEA	VEGETABLES
COFFEE	TIMBER
WATTLE	FRUITS


NORTH MARA AND MUSOMA DISTRICTS
MAIZE
FINGER MILLET
COTTON
MILK
RICE
BEEF
Shirati
Lyegore
Ochuna
Maji Moto
Nyamongo
Mugango
Nyabaingere
MBULU DISTRICT
WHEAT
MAIZE
SEED BEANS
PYRETHRUM
Kitete
Oldeani
Mokuyuni
Madege
Galappo
Basotu
Katesh
LUSHOTO DISTRICT
TEA
COFFEE
WATTLE
VEGETABLES
TIMBER
FRUITS
Mnazi
Mlalo
Mkomazi
Mashewa
Mombo
Korogwe
Kibati
Kimamba
Morogoro
Kisaki
MOROGORO DISTRICT
SISAL
COTTON
PADDY
SORGHUM
KAPOK
VEGETABLES
FRUITS
COFFEE
CATTLE
RUNGWE DISTRICT
TEA
RICE
COFFEE
FRUIT
PYRETHRUM
FRUIT
Chimala
Makambako
Njombe
Lupembe
Madilu
Lugarawa
Milo
NJOMBE DISTRICT
TEA
WATTLE
PYRETHRUM
WHEAT
POTATOES
RICE
VEGETABLES
Main Feeder Roads
Minor Feeder Roads
Penetration Roads

This programme represents the beginning of an ambitious effort to cover all districts in the country. Additional work has already been undertaken in the cotton growing areas of Shinyanga Region and the sisal growing areas around Tanga. The Pare mountains and Kilimanjaro will be the subject of a future study.

Continuing Projects.

57. These are projects carried over from First Five-Year Plan and in the process of being constructed. Under this heading projects are included with total expected expenditure of Shs. 57·45 million.

Betterment Units.

58. Four teams of qualified personnel that will be directed from Headquarters to carry out specific structural improvements on the listed roads are provided for here. Funds will be allocated for personnel and equipment to form such terms.

Additional Plant and District Roads Takeover.

59. Together with Betterment Units these two items give a total expenditure on new plant and equipment of Shs. 40 million.

60. Most regions are at present under-equipped and the purpose of the additional plant is to bring them up to full equipment strength as soon as possible. A survey is at present underway to determine the exact requirements.

61. To ensure better maintenance of district roads a programme was begun in 1967 for Comworks to take over these maintenance responsibilities. To date, Mara, Mwanza and Shinyanga have been taken over. It is the intention of Government to take over all district roads.

Main Roads in Towns.

62. This heading includes Central Government grants to help Town Councils finance improvements beyond an 18 ft. carriageway, with the exception of Dar es Salaam whose roads are being financed through Landsurvey.

63. A programme is presently being prepared and some Shs. 5·0 million has been set aside. This compares with Shs. 1·0 million in the First Plan.

Emergency Bridging.

64. Some Shs. 3 million has been set aside to replenish the depleted stockpile of emergency bridging used to re-open major link roads following the rainy season floods. The estimate has been derived on a basis of 120 feet of single span bridging per region.

Surveys and Investigations.

65. This provides for foreign and local expertise needed in the preparation of detailed engineering drawings and route selection for unfunded projects. A notional sum of Shs. 3 million has been provided.

Staffing and Training.

66. Shs. 29 million is to be spent to help staff the Roads and Aerodromes Division and to help equip the training school at Mgulani.

67. The Roads and Aerodromes Division has been absorbing almost 30 per cent of all development expenditure over the First Plan period and 15 per cent of all Government expenditure.

68. An adequate supply of skilled engineers, inspectors and planners is crucial both to the success of the road programme which expands the road network, and to the maintenance of the existing stock of roads.

(i) *Planning Staff.*

69. The need for an integrated planning approach to the transport and communications programmes in Tanzania is of paramount importance. The choice of projects, the timing of their implementation and their integration with East African Community plans will be undertaken by the Comworks Planning Unit together with the Devplan Transport and Communications section. An increased amount of expertise in planning this sector is important in view of the money being spent within it. Development of planning capacity in this sector will, therefore, have high priority.

(ii) *Availability of Implementing Personnel.*

70. There is a shortage of skilled labour especially in the professional categories. Some personnel, such as Regional Engineers, take charge of several Divisions. The supply of skilled personnel is likely to remain inadequate as expatriate staff leave, because the output of local, qualified personnel builds up only gradually. The demand is, however, rising as a result of a great increase in road projects, increase in road mileage, increased demand for better and efficient maintenance and emergency repairs, etc. The take-over of the district roads will create an even bigger demand, especially for inspectorate staff and equipment operators.

71. The major constraint in staffing is the availability of skilled personnel, since, normally the establishment approved (in financial estimates) is bigger than staff available. The solution will be found through:

(i) An increased output of local, skilled personnel during the Second Plan, as the expanded training programme of the First Plan bears fruit.

(ii) Expanded training programmes in COMWORKS institutions (provided for above).

(iii) The recruitment of expatriate technical personnel, who will continue to be required until the completion of the long-term programme of manpower self-sufficiency.

72. The problem is more acute than in other sectors, because the investment programme has been expanding faster and because engineering training is particularly difficult. The manpower programme heavily emphasizes the creation of scientific and technical cadres, but there is a lengthy time lag before full effects of the policy are felt.

Airports.

73. The capacity of Dar es Salaam Airport and the likely level of traffic in the future has been the subject of a recent study. The existing terminal and parking facilities for aircraft can be improved for Shs. 6·4 million to ensure adequacy until the Third Plan.

74. For the longer term, with the inticipated growth in general tourism and package tour charters, the present facilities will prove inadequate and a new terminal complex will be investigated. This complex will be so sited and designed so as to be capable of expansion and modification as traffic grows during the 1980s.

75. *Kilimanjaro International Airport* will be developed to serve needs of the Moshi/Arusha urban complex (the fastest growing urban area in Tanzania), the development of Arusha as an international, commercial and political centre, and the international tourist trade.

76. Currently, Moshi and Arusha aerodromes together account for more cancelled flights than all the other aerodromes in East Africa combined. This is caused by a combination of heavy cloud and the proximity of Mounts Meru and Kilimanjaro. The plains of Sanya Chini, with the aid of landing equipment, will permit all-weather use.

77. *Other Aerodromes:* East African Airways are preparing traffic projections for each of the other Tanzanian aerodromes. Based upon these projections a decision wil be made as to the desirability of serving each centre by Otter or Friendship. Where traffic warrants a Friendship, improvements will have to be made in runways. For this purpose Shs. 5 million has been provided.

The improvements needed to complete Mtwara aerodrome are included under this head.

F. *Tanzania-Zambia Railway.*

78. The rail link from Kapiri Mposhi in Zambia to Dar es Salaam will be 1,166 miles in length, when completed. This new transport facility will provide land-locked Zambia with another outlet to the world's markets so that the unimpeded flow of exports and imports, so necessary for the growth of the Zambian economy, will be guaranteed in the years ahead.

79. The work on the link is well underway at present. The first stage, which is nearing completion, covers the final selection of the route, and accompanying survey data, complete with profiles and alignments. The second stage will be the final design of the link which will bring project to the third stage, which is the actual construction of the link.

80. The route selection and engineering survey was started in 1968 and is expected to take approximately two years to complete. In order to complete the next stage ahead of schedule and so ensure the earliest completion of the project, the design work, scheduled as stage two, has already been started on those sections where the engineering survey is complete. When the complete design is finished construction costs and time estimates will be determined.

81. The Tanzania-Zambia Railway Authority was established by the Governments of both Tanzania and Zambia to ensure the smooth implementation and early completion of the project. To date, the Authority, known as TAZARA, has been preoccupied with the organization of the survey, actual survey work, and with internal staffing. Work has recently been started on the organization of training facilities, both within Eastern Africa and overseas, for the operational personnel who will be called upon to run the railway.

82. During the Second Plan the Government of Tanzania will contribute funds to TAZARA for the execution of the project according to the phasing needs that result from the completion of the second stage.

83. In the overall financial estimates of the Plan, an allowance of Shs. 305 million has been made in the provision for development spending to cover the local costs of the project which are expected to accrue during the Second Plan period. Of this total, Shs. 200 million is intended to be generated by drawing down commodity credits, the remainder to be contributed from the overall supply of local funds.

G. *Transport.*

(i) *Transport Licensing Authority.*

84. The Transport Licensing Authority was established in 1956 to license goods and passenger transport operations in Tanzania. Under the Amendments introduced in 1962 the Licensing Board has, subject to an appeal against its decisions, full discretion on whether or not to grant an application for a license. It is required to take a number of factors into account when coming to a decision. The main considerations are:—

(a) the extent to which the proposed service is necessary in the public interest to prevent uneconomic competition with other forms of transport;

(b) the reliability, financial stability, and facilities at the disposal of the applicant;

(c) the desirability of encouraging African participation in the transport industry.

There are two types of license the Board can grant, a public carrier's license and a private carriers license. The former allows carriage of goods for hire while the latter only allows the holder to carry goods on his own account. Private carrier licenses are issued for one of three areas; Dar es Salaam and environs; Tanga and Pangani Districts; and the remainder of Tanzania. There are certain exceptions allowed in such trades as perishable foodstuffs, mining and the carriage of goods from Mtwara to Dar es Salaam.

85. Normally licenses are valid for a period of two years but there are short term licenses lasting up to three months and special contract licenses lasting up to a year. This gives the system a great deal of flexibility in dealing with peak season loads and unforeseen contingencies.

86. One of the principal effects of the operations of the licensing Board has been the protection of the railway's differential tariff. Traditionally the Board has viewed the road transport industry as having its proper role in areas where no railway existed, in transporting goods to and from rail heads, and in short hauls along established rail lines. The definition of short haul has been variously applied at 60 to 100 miles. More recently, due to the frequently severe shortage of rail capacity the Board has looked more favourably upon applications to haul goods parallel to the railway over distances longer than 100 miles.

87. Recent statistics show that there are over 1,500 public licenses outstanding with under 3,000 vehicles authorized for operation and 4,000 private licences representing roughly 4,000 vehicles.

(ii) *Transport Industry.*

88. The following table illustrates the fact that the transport industry is characterised by a very large preponderance of operators owning only one or two vehicles:

TABLE 2

DISTRIBUTION OF PUBLIC CARRIERS ACCORDING TO FLEET SIZE (1967)

No. of Vehicles	Distribution (Number and Percentage)				Average Number of Vehicles in Fleet
	Operators		Vehicles Operated		
		%		%	
Below 3	1,462	92	1,735	62	1·2
3—9	118	7	515	18	4·4
10 or more	17	1	549	20	32·3
Totals ...	1,597	100	2,799	100	

89. Although the larger firms are small in number, they are responsible for a very large part of the long distance transport operations on the trunk route system. The two largest operations are those to the Southern Highlands and Mtwara: the EAR Road Services with a tonnage capacity of 670 tons for general goods and 27,500 gallons in tankers and Teeteeko Ltd. with a general goods capacity of 649 tons.

90. The Government is following an active policy of encouraging co-operative transport operations and a Tanzania Transport Corporation will be established in the early years of the Second Five-Year Plan to give the Government experience in the transport field.

91. Undoubtedly one of the most dramatic events in transport history occurred after the unilateral declaration of independence in Rhodesia when a massive road haulage operation was mounted by the combined efforts of the Governments of Tanzania and Zambia. Over 1,000 vehicles joined in this operation to lift over 200,000 tons of general goods and all Zambia's oil requirements each year. More recently the pipeline has transported oil requirements.

92. Zambia-Tanzania Road Services dominated this field with a rated tonnage capacity of 13,500. There were also some 767 sub-contractors who provided an additional 5,500 tons of capacity, but who have largely disappeared with the opening of the pipeline.

93. For the carriage of passengers there are about 600 licences outstanding. This represents an authorized fleet of over 1,500 vehicles. The structure of this trade is indicated below:

TABLE 3

DISTRIBUTION OF OPERATORS ACCORDING TO FLEET SIZE (1967)

Number of Vehicles	Distribution (Number and Percentage)				Average Number of Vehicles in Fleet
	Operators		Vehicles Operated		
		%		%	
Below 10	600	96	1,000	66	1·7
10—19	10	2	134	9	13·4
20—29	4	1	85	5	21·3
30 and over	5	1	301	20	60·2
Totals ...	619	100	1,520	100	

(iii) *Shipping and Ocean Going Freight Rates.*

94. Coastal shipping along the Tanzania coast is concentrated in the Dar es Salaam-Mtwara range where it provides a substitute for road haulage operations. Motorized coasters averaging 500 tons compete with traditional dhows and schooners for the traffic along this range. Most of the traffic is in provisions, some 35,000 tons a year going to Mtwara and some 20,000 tons to Lindi. The total export trade carried by coaster to Dar es Salaam only amounted to 5,000 tons in 1968. The major export crops from Mtwara, cashew and cassava, go to their markets in ocean going liner vessels. A study is presently being undertaken into the coastal shipping service. (See paragraphs 29-31).

95. Tanzania is a partner in two ocean going shipping companies, the Chinese-Tanzania Shipping Line and the Eastern Africa National Shipping Line (EANSL). The ship "Ushirika" owned by the Tanzania Government and the "Asia-Africa" owned by the Chinese Government comprise the fleet of the Chinese-Tanzania Line. EANSL, a joint venture of the Governments of Kenya, Tanzania, Uganda and Zambia, fully owns three vessels at present, the balance of the fleet being made up of chartered vessels, and sails once a month to Europe. Both Lines are running at a profit and training schemes are progressing well for local personnel. Over the Second Five-Year Plan EANSL expects to train 8 deck officers, 24 marine engineers, and 8 radio officers, in addition to the present total of 20 men now undergoing training.

96. As the nations of Eastern Africa are crucially dependent for their success in export markets on the price competitiveness of their goods ocean freight rates are a matter of great concern. Liner Conferences operating to and from the ports of East Africa have traditionally imposed their freight tariffs unilaterally To combat this highly unsatisfactory state of affairs an Intergovernmental Standing Committee on Shipping was formed in 1967 with a view to ending the monopoly power of these Conferences. Consultations have been initiated with all the major Conferences since that time and a dialogue has been initiated to stabilize freight rates through the joint efforts of the governments and the shipping companies.

H. *East African Corporaton and Community Communications Services.*

97. An important part of Tanzania's communications infrastructure is the responsibility of various East African institutions. Four self-financing Coroprations and two community institutions financed mainly through the General Fund are involved.

The East African Corporations.

East African Railways Corporation.
East African Harbours Corporation.
East African Airways Corporation.
East African Posts and Telecommunications Corporation.

Community Institutions.

Directorate of Civil Aviation.
East African Meterological Department.

98. The investments and other activities of these bodies make a considerable impact on the Tanzanian economy.

East African Corporations.

99. The phased investment plans for these institutions in Tanzania are summarized below:

TABLE 4

CORPORATION INVESTMENT IN TANZANIA

(Shs. million)

	1969/70	1970/71	1971/72	1972/73	1973/74	Total
E.A.R./E.A.H. ...	87·0	74·0	81·0	70·0	56·0	368·0
E.A.P. & T.	15·1	12·3	13·1	14·9	14·2	69·7
Other	4·4	3·7	1·5	1·5	1·5	12·6
Total ...	106·5	90·1	95·6	86·4	71·7	450·3

Thus, the estimated total investment in Tanzania may be as much as 500 million shillings over the second Plan allowing for the conservative nature of the above estimates.

(i) *East African Railways Corporation.*

100. Since 1948 East African Railways and Harbours have been charged with the responsibility of administering the unified rail and harbour system of the three East African governments. On July 1, 1969 the two components, Railway and Harbours will be separated into two new Corporations. This separation is accompanied by a decentralization programme so that although the East African Railways Corporation will continue to have its Headquarters in Nairobi, a strong Regional Headquarters is to be established in Dar es Salaam. The new East African Harbours Corporation will have its headquarters in Dar es Salaam.

101. In Tanzania the Railways Corporation operates the Central line from Dar es Salaam to Kigoma with branches to Mikumi, Mpanda and Mwanza, the Tanga-Arusha line, the link line between these East-West Routes (Ruvu-Mnyusi), the Southern Highlands Road Services, and Lake Shipping Services on Lakes Victoria and Tanganyika.

(a) *Rail Services: Goods Movement.*

102. Over the first Plan period rail traffic in Tanzania has been growing at an average 5·3 per cent per year in terms of tons and an average of 8·3 per cent per year in terms of ton-miles.

TABLE 5

RAIL TRAFFIC IN TANZANIA

(Tons in thousands, ton-miles in millions)

Year	Central Line		Tanga Line		Total	
	Tons	Ton-Miles	Tons	Ton-Miles	Tons	Ton-Miles
1963	892	382	322	35	1,215	417
1964	857	352	423	56	1,281	408
1965	929	416	406	53	1,335	470
1966	1,141	518	347	47	1,488	565
1967	1,104	521	390	53	1,495	574
Total per cent icrease 1963–67 ...	23·8	36·4	21·0	51·5	23·0	37·7

103. A significant feature of the statistics relating to the movement of goods traffic is that ton-miles increased much faster than actual tonnage. This reflects the increase in the average length of haul shown below:

	Miles
1963	202
1964	205
1965	215
1966	229

As the railway's competitive advantage over roads lies in its ability to move large quantities over long distances this trend is to be welcomed. Increases in the average length of haul reduce fuel consumption and handling charges and contribute to the increased overall efficiency of the system. Other physical measures of productivity such as the output per employee, tons per B.T.U. (fuel consumption), ton-mile per ton of wagon capacity available, all increased notably over the period. In the Second Plan the railway will continue to concentrate its efforts on areas of service where it enjoys a competitive advantage (long, bulk hauls) and to improve its overall efficiency as a result.

104. Independent efforts within the Railway administration should also contribute substantially to increased railway efficiency; a computer has been installed to control wagon movements more effectively, dieselization will be complete by 1976, and many investments linked with the hauling of longer trains such as lengthened loops, stronger coupling, heavier rails, better signalling, etc., are being undertaken.

105. It has been necessary for the railway to become extremely cost conscious as revenues have recently declined to such an extent that the Corporation is running a deficit. This has occurred because truck competition has skimmed off the high rated traffics on which the Railways Corporation traditionally depended to maintain the "differential" tariff. This problem is being investigated.

(b) *Investment Plans.*

106. East African Railways have a Development Programme prepared that extends to 1971. The total investment programme will be Shs. 655 million (including road services and Lake transport services).

Large identifiable projects in Tanzania up to 1971 include:

	Shillings
(a) Dieselization: Tabora-Kigoma Tabora-Mwanza	30,000,000
(b) Relaying track: Mwanza-Tabora Ruvu-Mnyusi	20,000,000
(c) Regrading and ballasting: Central Line Mwanza–Tabora ...	8,000,000
(d) Signalling programme Dar es Salaam-Morogoro	4,500,000
(e) Telecommunications Tabora-Kigoma	1,200,000
(f) Dar es Salaam yard improvements	2,400,000
(g) Dar es Salaam siding improvements	1,200,000
(h) Tabora diesel yard	600,000
(i) Korogwe yard works	280,000

	Shillings
(j) Kigoma yard works	100,000
(k) Dar es Salaam terminal buildings	1,320,000
(l) Morogoro diesel maintenance shop	4,400,000
(m) Survey, realignment and regarding Dar es Salaam-Morogoro	4,000,000
TOTAL ...	78,000,000

Over the period 1972–76 is it proposed to:

(a) Eliminate all steam traction.

(b) Put on fast passenger trains between Tanga and Moshi, Tabora and Mwanza.

(c) Convert all rolling stock to stronger (MCB) couplings.

(d) Regrade and realign the Dar es Salaam-Morogoro Line.

(e) Lengthen all loops east of Tabora from 1,400 feet to 1,900 feet.

(c) *Road Services.*

107. East African Railways will continue to operate road services to and from the Southern Highlands and from Dodoma/Iringa to Arusha as well as Mbeya to Itigi. A sum of Shs. 10 million has been allocated for fleet renewals.

108. In 1967 the Tanzania road services made a profit of 1·7 million shillings hauling 641,930 passengers, 59,579 tons of general goods and 16,000 tons of petroleum products over its 16 scheduled services. The vehicle fleet is composed of 81 general goods trucks, 18 tankers with 7 trailers, and 58 buses.

Lake Tanganyika.

109. Lake Tanganyika is serviced by the "LIEMBA", a vessel 54 years of age, four of them spent under water when she was scuttled in World War I. The "LIEMBA" can carry 350 tons of cargo, 384 passengers and tows a 100 ton bulk oil lighter between Kigoma and Mpungulu. Belbase barges are also operated on the Lake. It will be necessary to replace the "LIEMBA" and a sum of 32 million shillings has been earmarked for this purpose and for general dockside improvements.

Lake Victoria.

110. On Lake Victoria the ports of Bukoba, Mwanza, Nansio, Musoma and Shirati in Tanzania are serviced by scheduled ferry services. Jinja, Port Bell and Kisumu are the main ports of call in Uganda and Kenya.

111. Total tonnages of public goods have remained at approximately 200,000 tons each year since the beginning of the First Plan Period while the number of passengers had increased 10 per cent from 1963 to 440,000 by 1967.

112. The main advance during the First Plan Period has been introduction of two rail ferries the "UHURU" and the "UMOJA". They call mainly at Kisumu and Mwanza but a terminal is presently under construction at Musoma to end transhipment costs.

113. Passenger traffic will continue to be handled by the "VICTORIA", the "USOGA", the "CLARIAS", the "ALESTES" and the "BARBUS".

(ii) *East African Harbours Corporation.*

Harbours Operations.

114. The Harbours administration operates the three Tanzanian ports o Dar es Salaam, Mtwara and Tanga. Together with the East African Carg Handling Services, the Harbours Corporation is responsible for the moveme and loading/off-loading of all large sea-going vessels using these ports.

Tanga Port.

115. There are no deep-water berths at Tanga, only lighterage capaci capable of handling up to 270,000 tons per year from the 9 lighterage points a present levels of productivity. Present traffic levels are shown below.

(D.W. TONS) Per '000

	Imports	Exports	Total
1963	42	169	212
1964	40	182	222
1965	39	172	211
1966	60	169	230
1967	71	181	252

75 per cent of the export cargo, or 60 per cent of total cargo has, in the pas been made up of sisal. Although an overall decline in sisal exports is expecte the tonnage passing through Tanga should remain relatively stable during th coming five years. Production of sisal at Tanga will not be cut back greatly, a this is the most efficient area for sisal production in Tanzania.

116. The question of a deep-water berth at Tanga was first raised in 196 and has more recently (1966) been the subject of a study by E.A.R. & H. Th study concluded that some 250,000 more tons of traffic would be needed t justify a deep-water berth.

117. Plans exist for the establishment of several industrial enterprises i Tanga over the coming Five-Year Plan. These include:

(a) fertilizer plant;
(b) steel rolling mill;
(c) sisal pulp mill;
(d) plywood factory.

The import/export requirements of these plants together with servicing o the Moshi-Arusha and the Lake Regions will require deep water berths. Furthe investigations of this question is therefore to be undertaken with a view to providin for the installation of deep water berths.

Mtwara Port.

118. Mtwara has a 1,248 foot deep water quay. The port is capable o handling 370,000 tons of cargo per annum at a 70 per cent berth occupancy rat Present traffic levels have been well below this capacity and there should be n need for further capacity to be provided in the Second Five-Year period.

Dar es Salaam Port.

119. Dar es Salaam has a deep-water quay 1,824 feet length that provide berthing facilities for 3 vessels. Berth 1 is used for Belbase Cargo from Burund and Rwanda (but not exclusively). In addition there are four lighterage wharve with a total length of 1,929 feet and 8 lighterage handling points.

120. E.A.H. rate the capacity of the post as 640,000 tons composed of the three deep-water quays handling 150,000 tons each and the lighterage quays with capacity equivalent to 1·27 deep-water-berths. However, as is shown below recent traffic levels have been well in excess of this capacity figure.

(D.W. '000 TONS)

	Imports	Exports	Total
1963	236	278	514
1964	189	302	491
1965	247	302	549
1966	317	404	721 (42)
1967	389	546	935 (233)

(—) = Zambian

It can be seen that since the beginning of the Zambia operations in December, 1965 the port has been handling more than its rated capacity: some 12 per cent more in 1966, an astonishing 47 per cent more in 1967. The impressive amounts of cargo handled in recent years reflects the efforts of East African Cargo Handling Services, who have increased productivity enormously. The absolute level of labour productivity is still low by the standards of many other African installations but compares favourably with Mombasa and the trend is upwards.

121. At present 3 new deep-water berths (Numbers 4, 5 and 6) are in the process of being constructed for completion dates in December, 1969, June, 1970 and December, 1970. Contract options have been taken up on two further berths and the programme will be financed by a World Bank loan. With 8 deep water berths Dar es Salaam will be able to handle 850,000 tons of Zambian traffic per annum. Studies are presently being undertaken to ensure that the number of berths in Dar es Salaam harbour are sufficient to handle all Zambia's future requirements.

Investment Plans at Present.

122. The main identifiable projects over the period to 1972 are:

	Shs.
(a) Dar es Salaam Harbour—5 new berths	135,000,000
(b) Mjimwema Single Point Mooring Buoy	21,600,000
(c) Clearance of Dar es Salaam lighterage area and dhow wharf	7,800,000
(d) Harbour entrance survey (preliminary engineering on the widening of the harbour mouth)	20,000,000
TOTAL	184,400,000

The widening of the entrance channel itself will cost Shs. 100,000,000/- but this will probably occur early in the Third Plan period.

(iii) *East African Airways Corporation.*

123. East African Airways Corporation (EAAC) has made a profit in each of the years of the First Five-Year Plan while expanding its fleet and range of

operations. However, the operating statistics for the first Plan period, outlined below, show a marked decline in profitability in 1967. This has been caused by the depreciation charges of the Super VC 10 fleet.

TABLE 6

E.A.A. PERFORMANCE

	1963	1964	1965	1966	1967
Profits (Mn. Shs.)	9·2	10·2	8·3	14·2	3·8
Passengers carried (thousands)...	230	236	242	282	344
Passengers miles (mns)	225	225	224	272	375

124. EAAC operates a scheduled service to 17 points in mainland Tanzania as well as to Zanzibar and Pemba. Most of these centres are served by DC-3, although Twin Otter services are scheduled to take over some of these routes soon. Fokker Friendship aircraft fly the coastal service to Moshi, Tanga, Zanzibar, Lindi, Mtwara and Dar es Salaam (and will soon be flying to Mwanza) while Comets and SVC-10's connect Dar es Salaam to the other East African capitals, Europe/India, and Zambia.

125. The present fleet consists of 4 Super VC-10 aircraft with a 5th ordered for delivery in 1971. These aircraft are mainly intended for the East African/European and East African/Indian runs where they have proved very popular. EAAC has just extended its Eastern route to Hong Kong and by 1970 hopes to be flying to Tokyo twice a week.

126. The 4 Friendship aircraft have been in service since 1964 and are to play an important domestic inter-city and regional role during the Second Plan period. In Tanzania, Nachingwea, Songea and Iringa may soon have their DC-3 service changed to a Friendship service; this will require investment in runway facilities by the Tanzanian Government.

127. The 2 DeHavilland Otters in service will be increased to 4 in 1969. This fleet will service Zanzibar, Pemba, Mafia and Lindi as well as a northern Tanzanian game park circuit and a possible Bukoba, Mwanza, Musoma, Entebbe service.

(b) *Investments in ground facilitites.*

128. An air terminal is scheduled to be built in Dar es Salaam and a small hangar will be constructed at the airport.

East African Posts and Telecommunications Corporation.

(a) *Telecommunications.*

129. Demand for telephone connections and improved service is far in excess of capacity. On the basis of the present development, it is hoped to make up the shortfall in connections by 1980.

(b) *Investment Plans.*

130. To expand services E.A.P. & T. have proposed a Development programme (1968–72) which envisages a very substantial increase in capital spending. Over the next 5 years an average of 45 million shillings per annum will be spent as compared with a yearly average of 20 million shillings in 1965–67.

131. Spending in Tanzania 1969–72 will average Shs. 14 million per year and total Shs. 69·7 million over the Plan period. The actual amounts of planned investment in Tanzania by class of plant is given below:

TABLE 7
DIRECT INVESTMENT ON TELECOMMUNICATIONS IN TANZANIA 1969–72

(Shs. million)

Class of Plant	1969	1970	1971	1972	Total
Exchanges	3·5	2·3	1·1	7·4	14·3
Trunk Routes	5·2	5·2	2·6	1·4	14·4
Trunk Equipment	1·2	0·8	0·9	0·6	3·5
Subscriber Network	3·7	4·1	4·7	5·2	17·7
Telegraphs	1·6	1·4	0·6	0·5	4·1
Other	4·9	3·6	3·6	3·6	51·7
Total ...	20·1	17·4	13·5	18·7	69·7

(iv) *East African Materological Department.*

132. The East African Meterological Department is one of the specialized departments of the East African Community. Among its functions are providing forecasting services for farmers, to civil aviation centres, shipping and to many other organizations.

133. Over the first Plan period the "Met" spent approximately Shs. 350,000/- in Tanzania. If finance becomes available the Second Five-Year period will see a jump to Shs. 2·5 million. Among the projects that are planned are:

(i) Up-grading of 12, 12-hour Meterological stations to 24-hour stations.
(ii) Installation of Radiosande at Tabora.
(iii) New gauges and replacement of worn out equipment.
(iv) Automatic picture transmission in Dar es Salaam.
(v) Radar replacement for Dar es Salaam.
(vi) Transmissometer and ceilometer.

(v) *Directorate of Civil Aviation.*

134. The Directorate is financed from the General Fund of the Community. It is responsible to the Communications Council for the following:

(a) Licensing of pilots, navigators, radio operators and engineers, both air and ground staff.

(b) Provision of Air Traffic Services, Briefing Service, Search and Rescue, Telecommunication Service and Radio Navigation Aid Service.

(c) Advising the three governments on airport and aerodrome requirements and development, Aerodromes Fire Services and the International Civil Aviation Organization.

(d) Regulation of registration and airworthiness of civil aircraft in East Africa; and

(e) Investigation of aircraft accidents.

135. Through the School of Aviation, at present, a United Nations Special Fund Project staffed largely by ICAO personnel, it trains its own staff in Air Traffic Control, Communications and Radio Maintenance.

136. Throughout the period of the Second Five-Year Plan, as required in the East African Treaty, the DCA will be developing the sub-flight information centre at Dar es Salaam. As Dar es Salaam Airport continues to have a very rapid traffic growth an instrument landing system is to be installed along with radar facilities. The estimated cost of these and other DCA programmes in Tanzania is Shs. 5·0 million.

CHAPTER VII

ELECTRIC POWER DEVELOPMENT

Electric power is a crucial service to a number of other sectors of the economy. A high rate of expansion of capacity is a necessary prerequisite of economic development. Industrial development, for example, has heavy requirements for power expansion. The growth of commerce, and the fast expansion of urban areas also contribute to the fast growth of demand for electricity. In addition to the continuing expansion of existing markets the Government is seeking to create means of supplying electricity to new categories of users, by extending supplies to new areas and by establishing rural electrification programmes in some of the more densely populated rural areas.

2. As the structure of the economy changes, industry and more sophisticated processing activities expand at a fast rate. The expansion of power supplies is a necessary ingredient for such development. Thus the effort to ensure a healthy decentralization of economic growth has to be matched by the provision of power at the various centres of regional economic expansion. Over the long run high compound rates of growth in demand for electric power will require programmes of major investment over each five year plan. The strategy of power development involves a phased programme of development of hydro-power sources to meet the fast growing need.

3. The hydro-electric power potential is a major natural resource the development of which, both in the coming Plan and over the long-term, will form a key task for the economy. The long-term potential is indicated in Table 1. Taking only those sources for which estimates have been made, it is estimated that electric power potential is as much as 1,315 megawatts. This is more than fifteen times the existing power capacity.

4. The Second Plan incorporates projects not only for the development of major new power sources with the development of the first stages of the Great Ruaha project and, on a smaller scale, the beginning of development of the Kiwira source, but also allows for systematic investigation in relation to Stiegler's Gorge and the Kagera River Basin, which will lay the foundations for development into the 1980s.

5. Although the capital costs of hydro-electric projects tend to be higher than alternative thermal sources, savings on recurrent costs are so considerable as to make hydro-power preferable for major developments. Thermal power will increasingly be relegated to meeting short-term needs, for small-scale local needs and to provide flexibility in the system. As the size of the total system grows, the absolute increases in supply over relatively short periods are large enough to justify the creation of additional hydro-capacity.

A. *Past Growth.*

6. In mainland Tanzania the installed power was increased from 48·85 megawatts (MW) in 1962 to 79·4 MW in 1967. In May, 1964 it was possible to inter-connect the Dar es Salaam and Tanga systems by a 132 KV transmission line fully equipped with sub-stations, control rooms, etc., to create, with Morogoro, the new coastal system. In 1964 the 33 KV Central Line sub-transmission was completed from Ruvu to Kilosa, including connection to Morogoro, which closed down its diesel station in September, 1964. Connection of the Central Line sisal

estates resulted in a rapid increase in unit sales by the end of 1964. In 1967 work was continued on a new 132 KV transmission line from Chalinze to Morogoro to meet the continuously increasing demands of the coastal system, including the Central and Tanga lines.

7. At Dar es Salaam (Ubungo) Coastal System, thermal units generating 13·2 MW were commissioned in 1968, bringing the present total capacity of the Coastal System to 68·4 MW, including the existing Kurasini thermal power station 16·7 MW, Hale power scheme 21·0 MW, and Pangani power scheme 17·5 MW. The planned installation of a further thermal plant, 18·6 MW capacity at Ubungo, to be commissioned in 1969, will bring the total capacity of the Coastal System to 87 MW in 1969.

TABLE 1

EXISTING AND POTENTIAL HYDRO-ELECTRIC POWER SCHEMES

River	Name of Site	Installed Capacity MW	Remarks
Pangani	Pangani Falls	17·5	Built 1938.
	Hale	21	Completed 1964.
	Nyumba ya Mungu	8	Under construction. Multi-purpose dam. Approx. £0·8 m. charge to power.
	Moshi 1	1·16	Existing.
	Moshi 2	13·5	Proposed alternative to Moshi 2A.
	Moshi 2A	5·0	Proposed alternative to Moshi 2.
	Buiko	2	Power/irrigation project.
	Mzimui	9	
	Garaya	2	
Wami	Pongwe	120	Multi-purpose project. Figures are quoted for ultimate maximum development of hydro-power.
Hingilili, etc.	Gonja	15	
Kagera	Rusumo and Kakono	100	Potential.
Great Ruaha	Kidatu and Mtera	200	Ultimate development.
Ruvu	"Lower Ruvu"	7·5	Mass concrete dam proposed.
	Kidunda	5	
Rufiji	Stiegler's Gorge	500	95 per cent firm power.
	Iringa	54	Development of R.B.S. proposal.
	Tosamaganga	1·4	Existing.
	Mbeya	0·35	Existing.
Kiwira	sites in Mbeya Region	233	Potential.
	Total	1,315 Mega-Watts.	

NOTE:—The power potential of the Ruvuma and Malagarasi Rivers is not yet known and is, therefore, not included in the above figures.

8. *The Nyumba ya Mungu Dam.* The construction of this dam, the largest in Tanzania, was designed to provide power and irrigation supplies. The rockfill dam was completed in 1966 at cost of £1½ million, and work on power house construction started in 1967. The power installed is 8 MW, with a safe capacity of 6 MW. Work proceeded in 1967 with the new 66 KV transmission line from the dam to Arusha, which will link the power station to the Moshi/Arusha system. With the new capacity of 6·7 MW at Arusha and the existing 2·76 MW at Moshi, the total capacity of the Moshi/Arusha system, after the commissioning of the Nyumba ya Mungu power station in 1969, will be 15·46 MW.

9. *Songea.* Construction of a new power station was started in 1967.

10. *Mtwara.* Plans were put in hand in 1967 for increasing the generating capacity to meet the growing demands of the area. TANESCO is planning to construct a high tension line to Lindi, where the station is becoming old and expensive to operate.

11. *Mwanza.* Final stages were reached in 1967 in the construction of a new thermal power station generating 4·5 MW, completed in 1968. A further 3 MW are to be installed in 1969.

12. *Mpwapwa.* The new power station was commissioned in 1967, replacing the old station taken over from Comworks.

13. *Nachingwea.* Plans were in hand to provide another generating set to meet an expected load increase in 1968.

Expansion in Sales.

14. Between 1950 and 1963 the total sales of energy by all undertakings increased from 35 million kilowatt hours (KWH) to 163 million KWH. Dar es Salaam increased from 10 to 58 million KWH and Tanga from 20 to 74 million KWH, including bulk supplies to Mombasa.

15. The average annual growth rate of total energy sales for the period 1963/67 is compared below to those for the period 1958/62 in the Coastal System (Dar es Salaam, Tanga and Morogoro), and the Moshi/Arusha system which together in 1967, accounted for over 90 per cent of the total load at all TANESCO load centres.

TABLE 2

GROWTH IN ENERGY SALES

	% per annum	
	1958/62	1963/67
Coastal System:		
Dar es Salaam	14·1	22·7
Tanga	4·4	0·8
Morogoro	7·8	61·6
Total	8·7	15·3
Moshi/Arusha System:		
Moshi	10·1	5·9
Arusha	10·2	10·6
Total	10·1	8·1

16. Unit sales of electricity in Dar es Salaam are more than 50 per cent of the total consumption in the country. The coastal system as a whole accounts for about 82 per cent and in the Moshi/Arusha system a further 8 per cent. Sales at other branches, which are less than 10 per cent of the total units consumed, experienced an annual growth of about 12 per cent from 1962/67. Total local sales (excluding export to Mombasa) in Mainland Tanzania show percentage growth over the six years' period 1962/67 as follows:—

Domestic	27 per cent
Commercial	59 per cent
Light Industrial and Maximum demand	112 per cent
Street Lighting	53 per cent
Total	78 per cent

Of this overall growth of 78 per cent (1962/67), Dar es Salaam alone accounted for 56 per cent.

17. The growth of industrial sales has been concentrated at Dar es Salaam and Arusha. At Dar es Salaam a very high growth rate of nearly 39 per cent per annum has been achieved since 1963. The average overall industrial growth rates at Dar es Salaam and Arusha are more than double those for 1958/62.

B. *Future demands.*

(i) *Coastal and Moshi/Arusha Systems:*

18. Demand projections for the Coast and Moshi/Arusha Systems are set out in Table 3. These are based upon estimates of population growth, electricity consumption per capita and likely industrial demand.

TABLE 3

SUMMARY OF THE GENERATING CAPACITIES AND POWER LOAD FORECASTS, FOR THE COASTAL SYSTEM (DAR ES SALAAM, TANGA AND MOROGORO)

(a) *Generating Capacities:*

	Existing Capacity Megawatts
Dar es Salaam (Kurasini)	16·7
Dar es Salaam (Ubungo)	13·2
Hale power scheme	21·0
Pangani power scheme	17·5
Total	68·4 MW

	Planned Capacity Megawatts
Dar es Salaam (Ubungo) to be completed in 1969	18·6
Total existing and planned capacity in 1969	87·0
Safe capacity (allowing for plant breakdowns), suggested by TANESCO	66·0

(b) *1968 Forecast of Maximum Demand sent out from power Stations:*

	1968 Forecast Megawatts
1967 (actual)	42·8
1968	46·7
1969	52·4
1970	57·7
1971	66·2
1972	76·0
1973	84·6
1974	93·8
1975	104·3
1976	115·3
1977	127·5
1978	141·0
1979	155·6
1980	171·2
1981	187·6
1982	205·3
1983	225·1

NOTE:—The maximum power demands sent out from power stations allow for the combined effect of transmission losses and diversity of maximum loads at each load centre.

Moshi/Arusha System

	Existing Capacity Megawatts
Arusha	6·7
Moshi	2·76
Total ...	9·46 MW

	Planned Safe Capacity Megawatts
Nyumba ya Mungu Power Station to be completed 1969	6·0 MW
1969 total existing and planned capacity ...	15·46 MW

1968 Forecast of Loads:

	Maximum demand Megawatts
1967 (actual)...	4·37
1968	5·1
1969	6·4
1970	7·2
1971	9·5
1972	10·4
1976	14·4
1977	15·6
1983	25·8

(ii) *Other Branches.*

20. Demand from other branches is expected to increase from an estimated maximum demand of 8·16 MW in 1969 to 12·54 MW in 1974. This covers a number of small sources of supply, demand estimation for each of which can be tricky, depending on the implementation of other development projects. Taken together, however, these sources generate a relative minor part of total supply.

C. *Steps required to meet demand, 1969/74.*

(i) *The Coastal System:*

21. It has been appreciated for some time that, with the rapidly increasing power demand in Dar es Salaam, the generating capacity of the Coastal System, as planned by 1969 (87 MW), will be adequate to meet the demand until 1972 or 1973 only.

22. The Pangani River will have, on completion of Nyumba ya Mungu power station, 4 hydro-electric schemes, the others being Hale, Pangani and the small station at Moshi, generating about 46 MW, of which 38·5 MW is transmitted to the Coastal System, and 7·5 MW will be available for the Moshi/Arusha System.

23. The next large-scale project to supply the Coast is the Great Ruaha Project. A comprehensive comparative study on the hydro-electric potentials of the Wami and Great Ruaha Rivers has recently been carried out which indicated definite advantages for a project on the Great Ruaha River. Arrangements are now in hand for financing the project during the Plan. The first stage will include the construction of a concrete dam 7 miles up-stream of Kidatu on the Mikumi/Ifakara Road, a power station at Kidatu, a tunnel to convey water from the dam to the power station, and transmission lines to Chalinze. This stage is scheduled to start in 1969 and to be commissioned in 1973.

with an initial power installation of 50 MW. The next stage of construction will involve an earth fill dam near Mtera to provide the main water storage for the scheme. Further power will be installed from 1974 to keep pace with demand until the full power capacity of 200 MW is installed about 1981. Estimated total cost of this project is Shs. 488 million, with cost per KWH generated of 4·12 cents and cost per KW installed of Shs. 2,440/-. It is expected that this project, together with the existing power installed, will be adequate to fulfil demands up to 1983 in the Coastal System, after allowing for plant break-downs to the extent of 21 per cent reduction of maximum power capacity. This project will also provide some assistance to flood control in the Rufiji River.

24. Diesel units generating 18·6 MW are being installed at Dar es Salaam (Ubungo) in 1969, to meet the short-term need until completion of the first stage of the Great Ruaha project. After 1983 an additional major power source will be required. The most promising is the development of the power potential of Stiegler's Gorge. However, Stiegler's Gorge has a capacity of more than 400 MW which will be nearly twice the capacity existing by 1983. The development of the Stiegler's Gorge could be done in stages, but in order to justify the project a very high rate of growth of demand will be required during the 1980s. The development of the project therefore involves issues extending beyond the power question; the major large users of power, which could generate this sort of demand are industrial. Basic metal industries and chemical industries, for example, have heavy power requirements of the order of magnitude required for this project. Study of the Stiegler's Gorge project will therefore be undertaken in the context of the long-range industrialization programme, during the first years of the new Plan. As implementation of the project will take at least eleven years decisions will be required during the Second Plan period.

25. This project could therefore become the major focus of the basic industry stage of industrialization during the 1980s and 1990s.

26. Shs. 10 million has, therefore, been allocated for the investigation of this project. In addition the National Water Resources Council will initiate and co-ordinate work on the broader implications for industrial growth.

27. The National Water Resources Council will also implement studies of the appropriate stategy for the development of other major power sources, so that the range of possible alternatives should have been fully examined before the timing of the Stiegler's Project is finalized.

(ii) *Moshi/Arusha System:*

28. The planned capacity in 1969 on completion of Nyumba ya Mungu power station will be 15·46 MW which should be adequate until 1977. Plans will have to be made for increasing the capacity by 1976 or 1977, either by commissioning a new project or by connecting the Moshi/Arusha and Coastal systems. Hydro-electric development in the South Pare Mountains near Gonja has been considered, and preliminary indications are that 12–15 MW of firm power in an average year may be developed at less than Shs. 2,000/- per KW installed, and at less than 5 cents per unit generated.

29. With the completion of the Nyumba ya Mungu dam project in 1969, there will be a gap of only about 70 miles between the Moshi/Arusha network and the Coastal system. A 132 KV inter-connection, about 170 miles long, between Hale power station and Kikuletwa power station in the Moshi area, estimated cost Shs. 15,400,000/-, is likely to be more economical than further extension of local generation in the Moshi/Arusha area. A feasibility study of the proposed transmission line, Hale/Nyumba ya Mungu, is to be undertaken, which will include a study of the Gonja hydro-electric power development proposal, which could be connected to the Hale/Nyumba ya Mungu transmission line.

(iii) *Other Areas:*

30. Until such time as demand is sufficiently large to warrant the high cost of inter-connection between stations due to the great distances involved, it will be necessary to develop supply areas in isolation with thermal plants. During the Five Year Plan increased generation will probably be required at Tabora and Bukoba; a new transmission line is to be built between Mtwara and Lindi, with new sub-stations.

31. In addition, Shs. 5,000,000 has been set aside in the capital programme for extending supply to additional small townships. This sum will allow for the steady extension of the system into new areas which did not previously enjoy the benefits of electricity supply.

32. In co-operation with the Government of Rwanda, a comprehensive study of the Kagera River Basin is to be implemented which will assess the hydro-electric potential of the Kagera River which is situated on the border of the two countries. A large potential exists on this major river, with a catchment area of 23,000 square miles, which discharges into Lake Victoria, for hydro-electric power, irrigation, flood control to achieve swamp reclamation and develop rural industries and a proposed ranching area. Apart from the Rusumo Falls and the natural fall of the river below Murongo, a potential dam site exists at Kakono which could be made to serve a multi-purpose project, including the generation of hydro-electric power. The gross potential at Rusumo is about 25 MW, and at Kakono 80 MW.

33. In view of the potential for development which exists in Mbeya Region, preliminary investigations have been carried out to ascertain the hydro-electric potential of the Kiwira River. The natural gross hydro-power potential of the Kiwira River, excluding dam construction, is about 74 MW. A much larger potential exists, if required, through the construction of dams. This large potential capacity compares with the existing thermal and hdyro-power plants, at Mbeya which have a capacity of 660 KW, and the maximum demand in 1967, which was 580 KW.

34. With the development which is to be expected in this region as the result of Plan programmes, in particular following the major communications developments, a beginning will be made in tapping the potential power of the Kiwira. The intention is to build a hydro-power station across Kiwira River generating 8–10 Megawatts, with transmission lines to Mbeya and Tukuyu.

Capital costs.

35. The total programme of electric power development will be Shs. 472 million, of which Shs. 15 million is to be spent on investigations of major projects to be implemented in subsequent plan periods. This programme will place heavy demands on the government budget in the period 1970/71–1972/73.

TABLE 4

TANESCO PROGRAMME

CAPITAL INVESTMENT AND FINANCE

Shs. '000

	Total	1969/70	1970/71	1971/72	1972/73	1973/74
External	212,348	26,466	42,682	64,355	56,285	22,560
Local (Government)	173,935	7,973	36,612	63,200	53,050	13,100
Local (Tanesco)	70,665	9,380	14,815	12,180	16,120	18,170
Total Investment	456,948	43,819	94,109	139,735	125,455	53,830

TABLE 5

TARIFF ENERGY SALES 1962 AND 1967

Million KWH

	Domestic		Commercial		Industrial		Street Lighting		Total	
	1962	1967	1962	1967	1962	1967	1962	1967	1962	1967
Arusha	2·37	2·74	1·10	1·97	1·74	4·48	0·15	0·17	5·36	9·36
Bukoba	0·35	0·41	0·22	0·54	0·12	0·28	0·05	0·06	0·74	1·30
Dar es Salaam ...	19·01	30·92	11·95	17·25	21·58	79·38	0·69	1·18	53·25	128·78
Dodoma	0·61	0·59	0·62	0·98	0·24	1·26	0·06	0·09	1·53	2·92
Iringa	0·64	0·67	1·21	0·71	0·47	2·13	0·04	0·09	2·36	3·62
Kigoma	0·15	0·17	0·09	0·34	0·17	0·24	0·6	0·06	0·46	0·81
Lindi	0·31	0·25	0·19	0·23	0·07	0·06	0·03	0·03	0·60	0·57
Mbeya...	0·76	0·86	0·56	0·89	0·09	0·21	0·09	0·05	1·45	2·02
Moshi	2·94	2·83	1·43	2·07	3·00	4·15	0·14	0·18	7·51	9·24
Mpwapwa	–	0·02	–	0·05	–	–	–	0·02	–	0·09
Mtwara	0·27	0·32	0·20	0·28	0·15	0·47	0·02	0·02	0·64	1·09
Musoma	–	0·09	–	0·13	–	0·02	–	0·02	–	0·26
Mwanza	2·03	2·00	1·21	1·75	0·76	2·24	0·17	0·21	4·17	6·2
Nachingwea	–	0·05	–	0·14	–	0·03	–	0·03	–	0·22
Singida	–	0·04	–	0·01	–	0·12	–	0·02	–	0·28
Shinyanga	–	0·12	–	0·23	–	1·35	–	0·03	–	1·72
Tabora	0·73	0·58	0·74	0·95	0·22	0·52	0·09	0·12	1·78	2·16
Tukuyu	–	0·02	–	0·04	–	–	–	0·01	–	0·08
Morogoro	0·71	0·94	0·57	1·18	0·65*	11·93	0·08	0·16	2·01	14·22
Tanga	7·86	5·74	1·52	4·42	43·34*	44·97*	0·29	0·37	53·01	55·5
Total ...	38·74	49·37	21·61	34·25	72·60	153·85	1·90	2·90	134·85	240·4

		1962		1967
*Includes sales to Sisal Estates:	Tanga	36·75	...	38·12
	Morogoro	0·27		—

TABLE 6

TANESCO EXPANSION 1962–67: SUMMARY

	1962	1967
Consumers (meter):		
Coastal System:		
Dar es Salaam, Tanga and Morogoro	20,976	24,585
Arusha/Moshi	4,405	4,522
Other branches...	8,468	10,207
Total Consumers ...	31,049	39,314
Millions KWH sold:		
Coastal System	108·25	198·4
Arusha/Moshi	12·87	18·6
Other Branches	13·72	23·3
Total Sales Mn. KWH	134·84	240·3
Local Export	24·09	
	158·93	
Installed Plant:		
Hydro-power MW	20·22	41·2
Thermal power MW	28·63	38·2
Total Capacity, MW ...	48·85	79·4
Powet Generated:		
Thermal units generated. KWH, Mn. ...	80·30	48·5
Hydro units KWH. Mn.	98·94	253·5
Total units generated Mn. KWH	179·24	282·00
Operation: Electricity Sales (Mn. Shs.):		
Revenue	30·96	59·84
Expenditure	17·96	27·62
Operating Surplus	13·00	32·22

TABLE 7

ELECTRICITY CAPACITY AND DEMAND, 1962/67

Station Type	Installed Capacity (KW)		Maximum Demand (KW)	
	1962	1967	1962	1967
Arusha Thermal	3,500	6,700	2,500	3,320*
Bukoba Thermal	336	800	252	432
Dar es Salaam Thermal	17,850	16,700	12,190	15,650†
Dodoma Thermal	890	1,210	410	760
Hale Hydro	–	21,000	–	21,000†
Iringa Thermal	1,220	1,220	570	790
Kigoma Thermal	650	615	245	245
Lindi Thermal	480	440	240	202
Mbeya Thermal	320	320	425	580
Mbeya Hydro	340	340		
Moshi Thermal	299	1,600	1,282	*
Moshi Hydro	1,160	1,160		
Mpwapwa Thermal	–	206	–	60
Mtwara Thermal	540	915	290	390
Musoma Thermal	–	415	–	124
Mwanza Thermal	2,060	6,560	1,280	2,020
Nachingwea Thermal	–	250	–	100
Pangani Hydro	17,500	17,500	–	17,800†
Singida Thermal	–	270	–	98
Shinyanga Thermal—eliminate	–	–	–	–
Tabora Thermal	820	1,110	560	658
Tukuyu Thermal	–	110	–	48
Morogoro Thermal	883	–†	600	–†
Tanga Hydro	–	–†	14,861	–†
Totals (MW) ...	48·9	79·4	35·7	64·3

*Arusha/Moshi System.
†Coastal System.

TABLE 8

TANESCO ESTIMATED CONSTRUCTION EXPENDITURE 1969/74

	Shs. Thousands
Additional 33 KV Transmission Lines and sub-stations	8,981
Minor H.T. and L.T. Distribution and General Additions	68,707
Songea Project	248
Mtwara new power station	268
Nachingwea new set	8
Mbeya new set	550
Dodoma new set	390
Tabora new set	390
Electrification of small townships...	5,000
Ubungo Thermal Station, Sets 4, 5 and 6	4,324
Ubungo sub-station...	5,156
Mwanza Thermal Sets 4 and 5	1,621
Mwanza Thermal Sets 6 and 7	3,300
Kidatu hydro project	270,760
Nyumba ya Mungu power station	160
Mtwara/Lindi Transmission Line and sub-stations	2,800
Kiwira hydro-project	44,000
Nyumba ya Mungu/Kikaletwa/Arusha Transmission Line and sub-stations	84
Additional supply for Moshi/Arusha area	27,400
Additional Bridging Diesels, Dar es Salaam	12,650
Feasibility Study—Hale/Nyumba ya Mungu Transmission Line ...	84
Feasibility Study—Irrigation and power development of Gonja ...	67
Total Estimated Construction Expenditure ...	456,948

INVESTIGATION STUDIES 1969/74

	Shs. Thousand
Stiegler's Gorge, Rufiji River	10,000
Kagera River Basin Development	5,000
Total ...	15,000

E. *Rural Electrification.*

36. Programmes for the extension of electric power to rural areas will take two forms.

(i) *Small Township:*

37. There will be an expanded programme of extension of electricity supplies in small townships. The rural centres supplied under this programme will, in the main be growing fast, so that they are on the verge of becoming fully fledged urban areas.

38. Over the past Plan a modest programme of investigation of non-electrified urban areas was implemented, which involved study of the areas. An expanded programme of study will be implemented in the Second Plan. In the TANESCO programme Shs. 5 million has been allocated for the provisions of electricity to such new areas.

39. This programme will extend electricity to a number of new townships chosen for their potential; it is recognized that in some cases such facilities will not pay their way initially—supply to areas a few years ahead of strictly commercial justification will act as a spur to the development of minor urban centres and to

decentralized economic development, which will in turn expand demand to a commercially viable level. Investigation will, therefore, be concerned to indentify areas where potential growth in demand is considerable, as well as those where the existing level provides a sizeable market.

(ii) *Electrification in the countryside:*

40. The possibilities of extending electricity into the countryside are to be investigated in some of the more densely populated rural areas, where the intensity of economic activity is sufficient to provide a significant potential market. Such areas as Kilimanjaro, Ukerewe and Tukuyu are likely prospects.

41. Although it will not be possible to supply electricity to dispersed farms in the near future, it may prove possible to provide facilities to clusters of population in Ujamaa Villages. The objective is to provide the possibility of a diffusion of commercial, processing and small-scale industrial activity into the countryside, especially in those areas in which the pressure of population on the land suggests the need for a fast expansion of employment outside agriculture.

42. The Ministry of Commerce and Industries is to launch a series of stduies into the possibilities of rural electrification, which will examine the possibilities in the context of the Government's desire for economic decentralization, the special needs of Ujamaa Village in the more densely populated parts of the country, and the prospects for diversified programmes of rural development. The Water Development and Irrigation Division of Kilimo will participate in this activity particularly in relation to the possibilities of small-scale hydro-schemes.

Finance.

43. These programmes involve the provision of electricity in circumstances in which, at least initially, supply would not be justified on strictly commercial grounds. Because TANESCO must generate surpluses to finance the large capital programmes of its past and present programmes, it is not in a position to subsidize such programmes from its own revenues. The government is, therefore, allocating funds for the development of these programmes.

CHAPTER VIII

COMMERCE AND TRADE

A. *Introduction.*

In the colonial period Tanzania developed as a typical agricultural export economy. The pattern of trading institutions and communications was arranged to facilitate the export of primary commodities and the distribution of imports of manufactures. The major towns grew up on the coast at the terminus of the two main railway systems—Tanga at the end of the Tanga line, and Dar es Salaam at the end of the Central/Mwanza lines. The southern parts of the country—especially Mtwara and Ruvuma, but also Mbeya to some extent—remained apart from the rest of the economy.

2. The excessive dependence on foreign sources of supply for virtually all manufactured goods, and the corresponding dependence of the economy on primary commodity earnings as a source of income meant that the pace of development was largely set by forces outside local control. Fluctuations in export earnings resulting from unstable world markets determined the capacity of the economy to import and invest. Not only are primary commodity markets unstable, however, but over the long-term in a situation in which world prices for manufactures have been rising steadily, the trend in primary commodity prices has been drifting downwards. This has had a number of causes—world development is associated with growth in demand for industrial products at a much higher rate than for raw materials, modern technology has led to a growth of synthetic substitutes for natural materials, etc.

3. This situation has two tragic results. The efforts of developing nations to expand their output increases world supply faster than world demand, so that the result of any increase in production is a drift downward in world prices. The benefits of such expansion are reaped by the manufacturing nations through lower raw material prices, while the developing countries are merely cutting each other's throats. Continuation of such a structure of trade means nothing less than the increasing exploitation of the people of the developing world by the industrialized nations.

4. The second result of this structure is that in the rural areas all efforts are directed towards the production of commodities for these overseas markets, to the neglect of the expansion of the domestic production of foodstuffs, which would more immediately contribute to the well-being of Tanzanians. This results in the world-wide paradox that while the developing countries continue to expand supplies of agricultural products to an already over-supplied world market, the scarcity of domestic food supplies increases so that, in many cases, they become dependent on supplies of surplus foodstuffs produced in the industrialized countries.

5. The underdeveloped nature of domestic industry meant that in the early 1960s roughly half of total imports were consumer goods, including not only more complex manufactures, such as automobiles, but also the bulk of textiles and many other simple commodities. Capital investment not only required the import of machinery and equipment, but also cement and many other building materials.

6. On the export side, there was an over-dependence on three major crops—coffee, cotton and sisal. In 1962–63 these three commodities accounted for almost three-fifths of total exports.

7. Another feature of the structure of trade was the relatively heavy concentration on trade with the United Kingdom and Western Europe. Although trade with the two partner states in the East African Common Market was fairly well-developed, it operated under arrangements which were very much to Tanzania's disadvantage, a situation which, it is hoped, will be progressively redressed with the effective implementation of the treaty for East African Co-operation. Trade with other African countries was completely neglected, as was trade with the socialist countries.

8. The unsatisfactory state of affairs revealed in the balance of commodity trade at the end of the colonial period, was reproduced to an even more extreme degree amongst the agencies which conducted this trade. The handling of international trade was dominated by expatriate firms or by a few local private enterprises which contributed little to the welfare of the mass of the population. The institutions which financed and insured the trade were all foreign. The trade was carried on foreign ships. Not only was the country cast in the role of primary commodity producer, but little of the wealth flowing from the trading activities in these commodities found its way into local hands. The major exception to this was the development of co-operatives in cotton and coffee.

9. Since Independence, continuing efforts have been made to alter this unhappy state of affairs. The expansion of the role of the co-operatives dramatically increased local control over commodity trade. A series of steps in the implementation of the First Plan, and as a result of the Arusha Declaration, increased the public involvement in wholesale trade. Taken together, the State Trading Corporation, the Marketing Boards and the Co-operatives now provide an institutional basis for the socialist development of commerce. The nationalization of all financial institutions has resulted in public control of all profits generated by the finance of trade and Tanzania has now begun to participate in the international transport of her commodity trade. This will not only generate direct returns, in terms of the profits recouped, but will also provide long-term flexibility for the East African countries, by reducing dependence on foreign shipping cartels.

10. The regional structure of trade has been shifted somewhat since independence, although not as much as would have been desired. Trade with the socialist countries has grown much faster than trade with any other group of countries, but starting from a very small amount, it still represents a relatively minor part of Tanzania's overall trade. East African trade was retarded by the unsatisfactory arrangements existing before the implementation of the East African Community, but can now be expected to grow again. Trade relationships with Zambia have been greatly strengthened, although inadequacy of the communication links has limited this growth. However, trade with other African countries continues to be insignificant, and trade with the Far East has not grown as fast as would have been commercially desirable.

11. Some progress has been made regarding the commodity pattern of trade. Relative dependence on the three major crops has declined, while such crops as cashews, tobacco and pyrethrum have enjoyed a very high rate of growth. Also, the impact of industrial development is beginning to be felt with some decline in the relative importance of consumer goods in the total import bill.

TABLE I

ORIGIN AND DESTINATION OF TRADE: TANZANIA

	Export		Import	
	1962 %	1967/8 %	1962 %	1967/8 %
U.K.	32	25	26	24
Other Sterling Area	21	26	14	8
E.E.C.	21	14	11	21
East Africa...	6	5	21	17
Socialist Countries	—	6	1	7
Others	20	24	27	23

TABLE II

COMPOSITION OF IMPORTS*

	Export		Import	
	1962/3		1967/8	
	Value	Total	Value	% Total Value
Consumer	480	47	548	33
Intermediate	152	15	285	17
Transport equipment	100	10	227	14
Capital goods	275	26	597	35
Miscellaneous	26	2	30	1
Total ...	1,043		1,687	

. . Not available. — Nil or negligible.

*Mainland only.

12. However, the basic situation has not yet been fundamentally transformed. Imports of foodstuffs have been growing at an alarmingly high rate. With urbanization the domestic market for food products is expanding very fast; in the absence of vigorous policies it is likely that this would give rise to an increasing dependence on imports for a widening range of basic food requirements. Apart from the special circumstances leading to the sale of petroleum and petroleum products, exports are still virtually entirely made up of primary products.

13. The transformation of this situation is a matter for agricultural and industrial policy, and is discussed in those chapters; trade in this respect merely reflects the developments of other sectors. The creation of export oriented industry, the expansion of domestic production of such foodstuffs as wheat, rice and dairy products, and the fast expansion of sales of domestically produced consumer goods are intended to have a much more significant impact in transforming the commodity structure of trade over the coming decade than was achieved in the 1960's.

14. During the Second Plan, the import of consumer goods will be held constant, growth in imports being concentrated on investment and intermediate goods. By the end of the Plan the bulk of requirements for textiles, for example, will be met from East African sources of supply. Wherever agricultural possibilities

allow, the local food market will be met from local output by the mid-1970's—in the case of dairy production, the natural limits on the rate of expansion of the dairy herd may render the time period for the achievement of this target somewhat longer. A concentrated effort is to be made to promote trade with East African Community partners and with Zambia.

15. In terms of institutional arrangements, a number of developments are planned. The S.T.C. will increase the scope of its operations both domestically and internationally. Its wholesaling facilities will be extended in regions and the range of products it handles will be steadily expanded. It will take on a much more energetic role in expanding trade with Uganda, Kenya and Zambia. It will also pursue expanding trade possibilities through bilateral arrangements with socialist countries. The domestic efforts of the S.T.C. will be supplemented in the Regions by expanded wholesaling and retailing activities by the co-operative movement, while in the context of the Ujamaa Village, co-operative retailing will be developed as part of the overall co-operative approach.

16. The rest of this chapter sets out in detail the strategy to be pursued in relation to: —

(1) Internal Trade.
(2) Foreign Trade.
(3) Development of the Public Sector.

B. *Internal Trade.*

(a) *General Strategy:*

17. Emphasis on food production will generate increasing internal trade.

18. One of the major factors supporting the emphasis on food production is the very rapid growth already experienced in the domestic cash market for food stuffs. This growth is related to the rate of urbanization and would lead to a substantial increase in imports in the absence of a fast expansion in local food production. Over the last 2–3 years, imports of dairy products have been increasing at a rate of about 25 per cent a year. Demand for cereals, such as rice and wheat (1967 import: Shs. 4 million and Shs. 18·6 million respectively) is rising at a rate which implies an increase of around 50 per cent over the Plan period and a tripling within 15 years. At today's prices, this implies a market for rice of around Shs. 150 million by 1980 and a demand for wheat of between Shs. 110 and 120 million by the same date. This will create a domestic cash market for foodstuffs as economically significant to the farmer as the current markets for the more important export staples.

19. In large areas of the country, there is considerable protein deficiency, with a need for meat which cannot be realised with existing income and price levels. Demand for fruit and vegetables is rising rapidly especially in towns: the value of goods sold at Kariakoo at Dar es Salaam City Council auctions, for example has been growing at nearly 15 per cent a year.

20. The emphasis on food crops brings a need for greater regional specialization in their production. The zoning of crops on the basis of the natural features of the various parts of the country in the district crop priorities is one side of the question. Improvements in productivity will result, thus increasing potential markets. But the possibility of specialization will depend primarily on the opportunities for trade. Here the vital factor is likely to be the quality and cost of distribution.

21. The most important market for agricultural goods will be in the towns. If the present rate of urbanization continues, the population living in towns will rise from its present level of 678,000 to over 2 million by 1985. In addition, cultivators of high-value crops, such as tea, coffee, or flue-cured tobacco, will turn increasingly to the purchase of their food.

22. The importance of the towns as a market for agricultural goods indicates that an essential part of the strategy of developing internal trade is the expansion of domestic manufacture of more consumer goods through a vigorous programme of industrialization. As the chapter on industry points out, there is no inconsistency between emphasis on rural development and a policy of rapid industrialization. The prosperity of many farmers producing for the domestic market depends on the growth and prosperity of their nearest town. New industries in the towns bring increased demand for the goods the farmers produce. In addition, industrialization in the form of new processing capacity has a vital role in creating and widening markets for agricultural goods.

23. During the Plan period a number of consumer needs currently satisfied by imports from overseas will be met from East African sources. The most notable example will be the growth in sales of East African textiles. The function of trade will be to distribute efficiently the expanding output of local industries to the consumer and also to act as a channel of communication regarding the tastes of the consumer to the new industries.

24. It is estimated that the expansion of gross output of Tanzania manufactures for the Tanzania market over the coming five years will be more than Shs. 800 million. Expansion of sales of that order will be required both to achieve the industrialization targets set in the Plan and to minimize the use of scarce foreign exchange to meet current needs, thus enabling the finance of rising imports of investment goods.

25. Expansion of trade in these manufactures combined with the considerable targets for production of the marketed food products, will expand internal trade at a very much higher rate than Tanzania's external trade.

26. In order to ensure that industrialization is as consistent as possible with the interests of the farmer, a reasonable balance must be struck between the benefits of increased output and new wage employment and an increase in the costs at which goods are supplied. However, the shift to domestic sources of supply inevitably requires some limitation of the range of consumer choice.

(b) *Existing constraints and the strategy for expansion.*

27. Internal trade faces certain geographical impediments. Some 60 per cent of the population lives on 25 per cent of the land, scattered in more or less large enclaves around the country's borders. The only really extensive areas of population, communications, and trade are around Lake Victoria and along the Tanga Line. In the centre of the country, only Iramba, Nzega and Dodoma districts have population densities of 50 per square mile or more. This pattern is the major limiting factor on the growth of trade on a nationwide basis, even after the standard of communications has been improved much above its present level. However, the relatively dense border populations indicate the potential for trade with neighbouring countries.

28. Greater efficiency on the railways and a better standard on the roads will considerably reduce the level of distribution costs and in effect bring towns and regions closer together. The benefits which the various regions of the country enjoy from the existing transport system vary greatly and by no means proportionately with their economic potential. The development of the trunk road network will account for a major part of expenditure under the Second Plan, with Tanzam

development as the largest component in the total. The Tanzam highway for example will cut transport costs between Mbeya and Dar es Salaam by half. Mbeya is a region of high economic potential, hampered in the past by poor communications. Its closer integration into the national economy, together with the entrepot possibilities attendant on through traffic with Zambia, will stimulate its development as a major trading centre. Road construction is also expected to make a major contribution in terms of the planned direct road link between Mwanza and Arusha/Moshi, to replace the present roundabout route through Nzega and Singida. A substantial increase in transactions between two of the country's major trading regions will follow.

29. Storage is intimately linked with the nature and quality of the transportation system. Real savings can be effected not only by more and better planned investment in storage, but also by more efficient stocking methods. On the investment side, the implications of the expected expansion of crops for the domestic market are continuously under survey. A recent study of grain storage has assisted considerably in over-all storage planning. Implementation of the resulting programme has a high priority. In addition a nation-wide investigation of storage down to co-operative level is being carried out. More attention to storage by co-operatives will pay very considerable dividends in cost savings, preserving quality, and not least, in improving the co-operatives bargaining position *vis a vis* transporters. In too many cases at present, the former are at the mercy of the latter because the produce is deteriorating, or they have no storage space.

30. Processing is important as it improves the value/weight ratio of agricultural produce and hence pushes out the market boundaries. A more efficient location of processing facilities is being created by re-location of National Milling Corporation capacity. There are opportunities for tapping wider markets on both a geographical and an income basis. A considerable amount will be done to reduce costs, improve efficiency and hence to widen domestic markets through more rational location of milling capacity.

31. Processing is vital for the development of the dairy industry, one of the major areas of potential which remains to be developed. The agricultural priorities emphasize the expansion of dairy products to meet the fast growing demand and to reduce dependence on imports. It is also important for the development of production and markets for fruit, vegetables and other perishables. An investigation of the market in Dar es Salaam has shown that only a negligible quantity of fruit and vegetables is imported, the vast bulk of requirements being satisfied by local production. However, a number of products, though yielding little to producers, were expensive to consumers. One of the main reasons for this is the extent of wastage through deterioration and decomposition. This also affects the stability of prices.

32. At ministerial level Kilimo will be responsible for all stages of the marketing of agricultural goods, livestock, forestry and fish, including the marketing of processed commodities, i.e. it will be up to Kilimo to oversee the development of market and storage facilities, to foster new and improved marketing organizations, plan the development of processing, and supervise the arrangements for processed goods. A preliminary list of the types of processing which will come under Kilimo includes meat, fish, fruit, vegetables, milk, grains, sugar, coffee, tea, pyrethrum, cashew and oilseeds (including cotton seed). To carry out this function, Kilimo is establishing a marketing institute which will provide market research, intelligence and planning capacity.

33. The introduction of district crop priorities by Kilimo will provide direction for the creation of an efficient pattern of inter-district specialization and trade in agricultural products. The expanded co-operative training programme is intended

to ensure that the farmers are serviced by an efficient marketing system, so that the benefits of increased farm productivity can be shared by farmer and consumer rather than being lost through marketing inefficiency.

34. Mincom will be responsible overall for the production and marketing of local manufactures and the marketing of most imports. It must ensure that marketing and industrial organization, both public and private, in their pursuit of profit, also serve the requirements of national development. Some progress is being made with price control; improvement in data collection and administrative machinery will be pursued with the object of extending the range and increasing the effectiveness of the price control system. In addition, there are a number of simple things which can be done to encourage lower prices and better service. For example, regulations will be introduced to ensure that goods are sold at the prices marked. These regulations will apply initially to mass consumption goods in major urban markets. In addition to possible regulatory measures, the ministry has a major role to play in the provision of information, extension, and advice to the public and to traders.

35. There will be a vigorous policy for the development of public marketing institutions, with emphasis on a number of new forms of organization. Where co-operatives are already well established, such as in maize and paddy, the degree of centralization and of public middlemen is to be reduced. For instance co-operatives may now trade directly with each other and sell directly to the public within their own district.

36. In certain primary products, such as livestock, fruit and vegetables, where co-operative marketing has not yet managed to take root, and where realization of the potential is handicapped by lack of organization, the Ministry of Agriculture, Food and Co-operatives will play an active role in promoting co-operative marketing.

37. The State Trading Corporation will greatly expand its role in the field of internal distribution. The aim is to develop a truly nation-wide distribution network, whose facilities can be increasingly used by domestic manufactures. Branches will be opened in towns such as Dodoma and Tabora, where they do not now exist, and those in other centres will be reorganized and expanded. From the angle of its own viability, the handling of an increasing volume of domestic manufactures is essential for the S.T.C. Much of its present import business will decline over the next five years, as import substitution gathers momentum.

38. A very direct public contribution to the creation and expansion of internal trade can be made through the construction and improvement of market facilities. In Dar es Salaam, for instance, the Kariakoo market is already inadequate for its job, and adds significantly to the costs of distribution, e.g. through the non-provision of storage space. In the producing areas the construction and proper organization of markets can do much to improve the bargaining position of the farmers *vis a vis* the middlemen, as well as to reduce costs in general. Efforts will be made to establish other sorts of markets for instance in soft goods, utensils, craft products, etc., such as may be produced by small artisans.

39. The provision of accurate up-to-date information is often such an important factor in trade that it merits separate mention. It affects mainly the use of transport and storage and the marketing of uncontrolled crops. Considerable idle road transport capacity may exist in some areas, while in others there is extreme shortage. Clearing house facilities will be established to provide transporters with information about when and where transport is scarce. In the same way, information on storage availabilities will lead to better (and thus cheaper)

use of capacity. Thirdly, the dissemination to growers of information on the level and movement of prices in the main markets will help them in dealing with buyers and encourage them to take maximum advantage of market opportunities. The Kilimo marketing institute will fulfill these functions.

40. The increasing satisfaction of consumer needs through the production of local industry will bring with it a number of implications for the consumer and for trade. Inevitably the domestic manufacturer will not be able to supply the same range of choice as was previously available from diverse imports; some restriction of choice is a necessary cost the society must carry in return for the benefits of industrialization. Initially, also the new industries will pass through a learning period in which full quality which it is eventually intended to achieve has yet to be attained. The consumer must be ready to accept this burden in the interest of achieving the desired economic change; at the same time it is the intention of the government continually to emphasize the need for improving quality in domestic manufactures and continuously to press for cost reductions in the new industries.

C. *External trade.*

41. Although Tanzania suffers from excessive dependence upon primary commodities as a source of export earnings, compared with many developing countries, some success has been achieved in diversifying the range of primary commodity exports. In the past this flexibility stood to our advantage. Over the First Plan, for example, declining trends in the world sisal market were in part counterbalanced by fast expansion in the exports of other commodities. Nevertheless, the terms of trade swung against Tanzania and overall trade prospects remain overshadowed by the dubious prospects in world markets for a number of commodities.

TABLE III

DOMESTIC EXPORTS: TANZANIA

	1962/3			1967/8		
	Volume	Value (Shs. mn.)	% Total	Volume	Value (Shs. mn.)	% Total
Cotton ('000t)	40·3	181	15·1	60·4	267	16·5
Coffee (000t)	25·9	135	11·3	46·1	251	15·5
Sisal ('000t)	216·8	384	32·2	117·7	180	11·1
Diamonds ('000)c	618·2	104	8·7	835·2	179	11·1
Petroleum (mn. gals)	—	—	—	117·7	148	9·2
Cashews ('000t)	50·7	44	3·6	74·1	97	6·0
Cloves ('000t)	9·5	51	4·2	14·3	75	4·6
Meat ('000t)	5·9	42	3·5	5·7	46	2·8
Oilseeds (000t)	63·6	63	5·2	38·3	44	2·7
Tea ('000t)	3·9	32	2·6	6·3	44	2·7
Tobacco ('000 lb.)	891·0	2	—	10,046	37	2·3
Other	. .	153	12·8	. .	248	15·4
Total ...		1,191		Total	1,615	

42. Of major exports, the prospects for sisal are for a declining world market due to competition from synthetic substitutes, growth in coffee sales is limited by the quota arrangements of the International Coffee Agreement and the prospects for expanding pyrethrum export are strictly limited. On the other hand, high rates of expansion are expected for exports of cotton.

tobacco, cashewnuts and tea. Exports of some commodities, such as meat products and oil seeds have been limited by the poor growth performance on the output side rather than limitation in the world markets.

43. The trade projections, set out in Chapter XVI, are based on an assumed decline in world prices of modest proportions. This, along with the vagaries of climate, introduces the most considerable element of uncertainty regarding Plan forecasts. However, although in detail forecast is difficult, the need to extend the range of market possibilities is evident. Since independence the structure of Tanzania's external trade has been changing significantly.

44. Particularly in those commodities governed by quota or other market limitations in traditional markets there is a need to seek out new trading partners. Additional efforts will be made to develop new markets and to expand business with traditional ones. During the Second Plan it is intended to develop a cadre of commercial officers to serve in embassies abroad. Their job will be to establish contact with actual or potential buyers, to assess the performance of competitors, and to provide a steady flow of information to parastatal and private organizations in Tanzania.

45. Trade possibilities exist with the rest of Africa, the Middle East, Eastern Europe and the Far East. Development of such trading links will further lessen the traditional pattern of dependence upon Western European trading partners, although not leading to decline in absolute size of such traditional trade.

46. Difficulties to be expected in world commodity markets render promotion of trade with neighbouring countries of considerable importance. The Treaty for East African Co-operation presents Tanzania with great opportunities. In the north, and around the Lake, particularly, it will speed up the establishment of new lines of production as well as the achievement of more economic scale for existing line. The finding of export markets in neighbouring countries not only contributes to foreign exchange earnings and helps to diversify away from a few dominant overseas markets, but should also bring direct benefits to home consumers, through the reduced unit costs of large scale operation. Up to now, the volume of exports to Kenya and Uganda has been very small. With no trade barriers to overcome there is great scope for expansion.

47. In order to exploit these opportunities to the full a much more powerful and systematic sales promotion effort is to be launched in Kenya and Uganda, and in other neighbouring countries. It has been decided that S.T.C. agencies should be established in Kenya, Uganda and Zambia, in order to promote trade in both directions.

48. On the import side, the Second Plan will see a continuation of the shift in structure already evident in the First Plan period. The relative importance of simple manufactured consumer goods will decline. It is intended to hold consumer goods imports, including durables, constant over the Plan period while both the absolute and relative importance of capital goods and intermediate goods used by domestic manufacturing industry will rise sharply.

49. If the output and income growth envisaged in the Plan is achieved, then the rate of growth of domestic demand will be in excess of foreign earnings. At the same time in the absence of restraint there would be a sharp increase in spendings on imported goods. It will become increasingly necessarily to exercise restraint in such spending.

D. *The Public Sector.*

50. During the Second Plan it is intended to bring the import, export, and wholesale trade increasingly under the ownership and control of Government and people's organizations. In moving towards this objective, the emphasis will be on a flexible and pragmatic approach, and on the benefits which the nation is likely to derive from each particular step. The major responsibility for the development of the public sector will lie with the State Trading Corporation which, after its recent reorganization is poised for a rapid expansion of business. A substantial capital programme is envisaged for the S.T.C. over the Plan period. However, while priority will be given to the S.T.C. among national agencies, not all aspects of trade and distribution may be suitable for it to handle; there will be room for the development of other organizations, such as co-operatives and perhaps new institutions as well. Every effort will be made to enlist the skill available in the private sector, and there will be opportunities for partnership with and employment in public sector and people's organizations.

51. In the field of imports, a steady expansion of state monopoly business is planned. The emphasis will at all times be on the possibility of reaping national benefits from such business, and on the capacity of the S.T.C. or other public agencies to handle it effectively.

52. In operating import monopolies, particular attention will be paid to the following—

(a) Improving the purchase terms by placing orders in bulk, and at all times buying from suppliers who offer the best value for money. This will mean a complete reappraisal of Tanzania's traditional sources of supply. There will be new opportunities for exporting countries and firms, which have been struggling against entrenched brands and agencies, to compete on quality, price and performance, and rapidly to increase their business with Tanzania. The S.T.C. plans to set up buying offices abroad, to cover groups of supplying countries, so that it can achieve closer contact with exporting firms and maintain a continuous flow of information on world market availabilities and requirements.

(b) Holding adequate levels of stocks within the country so that demands from distributors can be met without delay.

(c) Developing a truly efficient, nation-wide distribution net work to ensure ready availability of goods throughout the country.

(d) Standardising and controlling trading margins in both the public and private sector.

53. In internal distribution, the S.T.C. will develop as rapidly as possible its capacity to act as the national distributor both for imports and for present and future import substitution industries. Branches and depots will be developed and expanded to handle the widest possible range of items. So far as local producers are concerned, the S.T.C.'s aim will be to put the whole national market at their disposal and to ensure that their goods flow freely to all parts of the country where there is an actual or potential demand. Branches will be responsible for organizing regional wholesaling and sub-wholesaling in the most economic and rational way, for collaborating with co-operatives and other local people's organizations, and for facilitating their entry into the trade where this is appropriate.

54. On the export side, an important role for the S.T.C. has already been referred to, in terms of promoting sales to neighbouring countries. A large part of our traditional exports to overseas destinations is already channelled through co-operatives and marketing boards. However, at present the boards do little or no business directly with overseas buyers. The possibilities of developing the local auction system into one where sales are made directly to importers will be investigated. Meanwhile there will be consultations with marketing boards to explore the possibilities of benefit from channelling a greater proportion of their produce through the S.T.C.

CHAPTER IX

TOURISM

The world tourist market is growing rapidly and East Africa has been increasing its share. Unless there is a spectacular check to world economic growth, tourist demand is likely to continue to expand at a high rate. This marks tourism out as an exception among export industries. Indeed, the immediate problem for Tanzania is to meet the demand which already exists.

2. Up to now, Tanzania's major tourist attractions have been the wildlife areas, especially in the north. We are still far from realising the full potential of this exceptional natural resource, owing to the acute shortage of hotel beds, which has limited the numbers of tourists and their length of stay in the country. There is also the fact that the Northern Parks form part of a circuit that includes Kenya and Uganda. Tanzania realises that the three countries together have a much greater tourist potential that if each tried to develop on a purely national basis. However, it is intended that an increasing proportion of tourists should be encouraged either to begin or to complete their visit to East Africa in Tanzania. At present, this is not often the pattern of travel. In an expanding East African tourist market, this can be done by generating a new type of business, rather than at the expense of any existing tourist trade, and in so doing can provide an increased diversity of East African tourist attractions.

3. The second major natural tourist resource after wildlife is the coast. The part of the coast most susceptible to immediate development is Dar es Salaam–Zanzibar, since much of the basic infrastructure already exists, in particular an international airport. The aim is to tie the northern wildlife and coastal resources together. Once this is done the variety of beach/wildlife/scenic holidays available in East Africa will be significantly increased. Among other possibilities, tourists will be able to start in Dar es Salaam and travel north via Kilimanjaro, Arusha and the Serengeti to Kenya and Uganda, or to move in the opposite direction and leave from Dar es Salaam. When the Kilimanjaro International Airport is complete, this will provide another point for arrival and departure and another set of East African travel possibilities.

4. The available estimates suggest that there were some 40,000 foreign visitors in 1968, that they stayed on average around 7–10 days, and that they spent some Shs. 60 million. However, the spending figures do not represent the net foreign exchange earned by the industry. To arrive at this, allowance must be made for imported capital goods (hotel equipment, etc.), consumer goods, and services (e.g., tour operators) needed to support, or resulting from, tourist demand. The repatriation of profits earned by foreign investors in the tourist industry is a further deduction from the gross spending figures.

5. Out of every Shs. 20/- spent by tourists, as much as Shs. 8/-, or 40 per cent, may have to be deducted to allow for such outflows. So from Shs. 60 million gross, one may come down to a minimum net figure of Shs. 36 million. In the context of a rapidly expanding demand, however, it will be possible to reduce considerably the import content of the tourist industry: by building hotels with cheaper materials; by developing the production and marketing of local products, especially food supplies and craft products; by localising the tour operation business; and by increasing the public share in the industry.

6. The tourist programme over the next five years will aim at increasing the number of visitors from 40,000 in 1968 to 120,000 in 1973/74. If each tourist is to spend one week in the country (a conservative assumption) we must, by

the end of the Plan, be able to provide accommodation for over 800,000 bed nights. The foreign exchange receipts from this will lie in the range of Shs. 120–160 million per annum. Allowing for a modest increase in the retention rate, net accruals to the country should be not less than Shs. 80–110 million per annum.

7. The strategy for the Second Plan will be two-pronged: increase the capacity of the established northern "wildlife circuit" and establish firm foundations for a Dar es Salaam–Zanzibar coastal circuit. Although it is bound to take time to tie the two circuits together initial steps will be taken in linking them before the end of the Plan.

8. The road from Dar es Salaam to Arusha is wholly bitumenised but the journey is too long to be pleasant without a night stop, so that hotel space will eventually need to be built midway, possibly in the foothills of the Usambara Mountains. Improved air communication will be achieved through the construction of the Kilimanjaro International Airport during the Second Plan.

9. The problem at present in the North is not one of finding more tourists, but of satisfying the demand which exists. At the peak season the northern hotels and lodges are turning away 2–3 tourists for every one they can accommodate. Not only does shortage of capacity restrict the number of tourists, but it also limits their stay in the country and hence the actual spending per visitor. The Northern Parks will be developed as a circuit, so that tourists stop the maximum time at each of the main attractions. Currently these are Manyara, Ngorongoro and Serengeti but the circuit will be extended and diversified by the addition of Parks at Tarangire and Kilimanjaro, and the further development of Arusha National Park. There will be careful and integrated planning of bed capacity taking account of the capacity limits of each park, to ensure optimal returns from the circuit as a whole.

10. The next major element of our strategy relates to marketing. At present this is no problem, since demand is far in excess of capacity. But the creation of a new tourist area on the coast will require a substantial marketing effort. We therefore intend to develop a locally-based tour operation industry on the coast to sell the new facilities. This will serve another function too. At present, the net income which Tanzania earns from each tourist is reduced by the fact that most of the income from tour operation is earned outside the country. An import substitution of these services will therefore also benefit the foreign exchange position.

11. The new Tourist Corporation will take charge of the public sector hotel programme and will establish a tour operation company in partnership with established operators. This travel agency belonging to S.T.C. has already been transfered to it.

12. The phasing of the hotel programme, almost all of which will be in the public sector, is as follows:—

	Beds	"Foreign" Bed-nights per annum
Existing capacity	1,400	224,000
New Capacity:		
Public Sector: Phase I	1,140	182,000
Public Sector: Phase II	1,650	264,000
Private	400–1,000	64,000–160,000
Total	4,590–5,190	734,000–830,000

NOTE:—"Foreign" bed-nights means bed-nights realised from people from outside Tanzania. It has been estimated that there are on the average 160 foreign bed-nights per bed per year for beds that are included in "existing" beds. Projections are based on this estimate.

13. Preliminary estimates indicate that the direct capital cost of the public sector hotel programme will be in the region of Shs. 160 million. However, it may well be possible to scale this down substantially. Of the Phase I programme, 300 additional beds will be ready in the Northern circuit by the end of 1969, while on the new Dar es Salaam circuit 850 beach beds plus a 100-bed wildlife lodge and a major expansion of one of the city hotels will be completed by the end of 1970. All but 400 beds represent public sector projects.

14. Public sector projects currently being implemented involve a relatively high cost per bed—in the range Shs. 50,000–75,000. However, these costs will be thoroughly scrutinised, since it is the intention of Government to promote the use of local materials and design in hotel construction. The aim will be to serve the high income markets with a range of hotels offering high-grade service and an authentic Tanzanian flavour, but which are considerably cheaper to build. There will also be more thorough investigation of the market for tourists of more modest means.

National Parks.

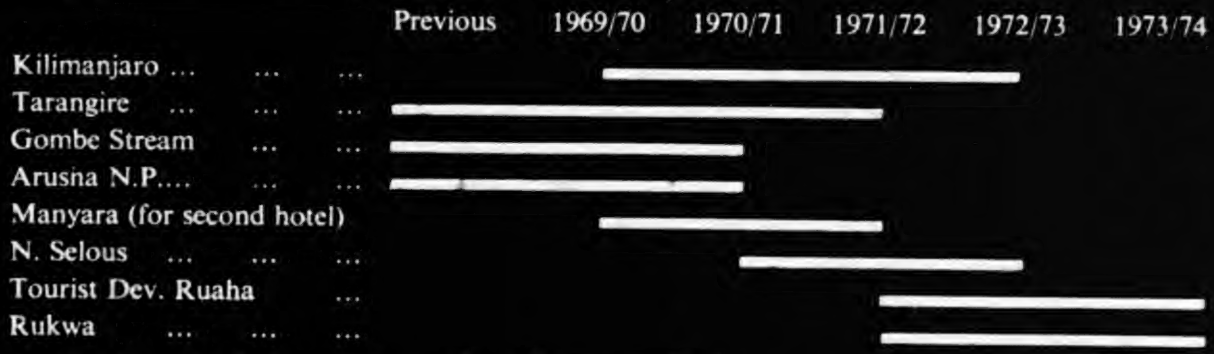
15. Wildlife, with its scenic connotations, is the country's major tourist attraction at present, and will continue to give Tanzania, along with other East African countries, a special appeal. The conservation and development of the wildlife areas are, therefore, vital for the tourist industry, not to mention national and cultural considerations.

16. One of the major elements of conservation is to decide how many visitors each park can accommodate without destroying its raison d'etre. The following have to limit the flow of visitors to the northern wildlife areas. Accordingly, visitors.

Serengeti National Park	600
Ngorongoro Conservation Area	400
Lake Manyara National Park	250
Tarangire National Park	150
Arusha National Park	150
Kilimanjaro National Park	250
Mikumi National Park	200
Per day	2,000

17. This means that the above Parks have an approximate capacity of 730,000 per annum. This is of the same order of magnitude as the 1973/74 target figure for foreign bed nights. But only about half the total is expected to be spent in wildlife areas; the rest will relate to beaches and towns. Thus, the present development programme represents utilisation of only about one-half of the capacity of the National Parks in the North and Mikumi, and leaves the other Parks—existing and potential—still unused.

18. However, the capacity figures shown in the table are "potential" only and depend on considerable expenditure to develop the Parks concerned, particularly on Parks roads. In addition, we will be planning now for the time when we will have to limit the flow of visitors to the northern wildlife areas. Accordingly, National Parks envisage some preliminary development work in the Northern Selous, Ruaha and Rukwa areas.



Phasing of National Parks Programme:

Total capital expenditure by National Parks over the period 1969/74 is estimated at Shs. 32 million, some Shs. 13 million of which is expected to be covered by external loans and grants.

Game Reserves and "Hunting safaris".

19. A small but significant amount of foreign exchange is earned from hunting (including photographic hunting). This can be regarded as largely separate from the rest of the tourist industry. A beach holiday may include a visit to a national park, and vice versa but it is most unlikely to take in big game hunting as well. The distinctiveness of the hunting clientele may be best illustrated by the fact that their average expenditure is estimated at around Shs. 30,000 per person, excluding the cost of their journey to East Africa. Assuming the same retention rate as for ordinary tourists the net earning would therefore be in the region of Shs. 18,000/- per person.

20. It is estimated by the Game Division that there were 350 safari clients in 1968. On the basis of the estimates given above, this represents gross spending of some Shs. 10 million (Shs. 6 million net).

21. The Game Division's objective is to get the number of clients up to 550 by the end of the Five-Year Plan, representing foreign exchange earnings of about Shs. 16·5 million gross, Shs. 10 million net.

Marine reserves.

22. Immediate steps are necessary to conserve the beautiful coral reefs and formations off the coast. It is not considered appropriate at this stage to establish marine parks as such and to exclude fishermen from substantial off-shore fishing grounds. However, the Ministry of Agriculture, Food and Co-operatives will be taking steps to exercise a greater degree of control over coastal fishing with the purpose of conserving the coral formations which are such an important part of the coastal attractions, and at the same time safeguarding fish breeding grounds.

CHAPTER X

EDUCATION, LABOUR AND TRAINING

A. *Basic Policies.*

It is the policy of the Government of Tanzania: —

(i) To achieve essentially full self-sufficiency at all skill levels in the economy by 1980.

(ii) To give every Tanzanian child a basic education (Primary) as soon as the financial circumstances of Government permit, which is presently planned to be achieved by 1989.

(iii) To provide additional or further education (secondary, technical and University) only to the extent justified by the Manpower requirements of the economy for development: further to support students by bursaries only in post-secondary courses which will produce the specific skills needed for development.

2. These policies were formulated and adopted by Government for the First Five-Year Plan, they have worked well, and it is proposed they continue unchanged throughout the Second Five-Year Plan.

The Financial Hypothesis underlying the Manpower and Education Programmes proposed for the Second Five Year Plan.

3. The growth in availability of resources for social development is limited by the rate of growth of output. This is the basic constraint on the achievement of the important objective of universal primary education. Education, by far the largest social service currently receives about 20 per cent of Tanzania total annual recurrent expenditures. This includes the amounts spent by Local Councils, most of which will in the future be taken by Central Government.

4. The availability of resources to government will grow at roughly the rate of growth of market output, between 7 and 8 per cent per annum; the programme expansions proposed for the Plan period must in total, be designed to stay within the real resources available.

5. However, in order to achieve full universal primary enrolment at the earliest possible date (1989) a growth rate of 9 per cent was allowed for education. This will increase Education's share of the national expenditure substantially

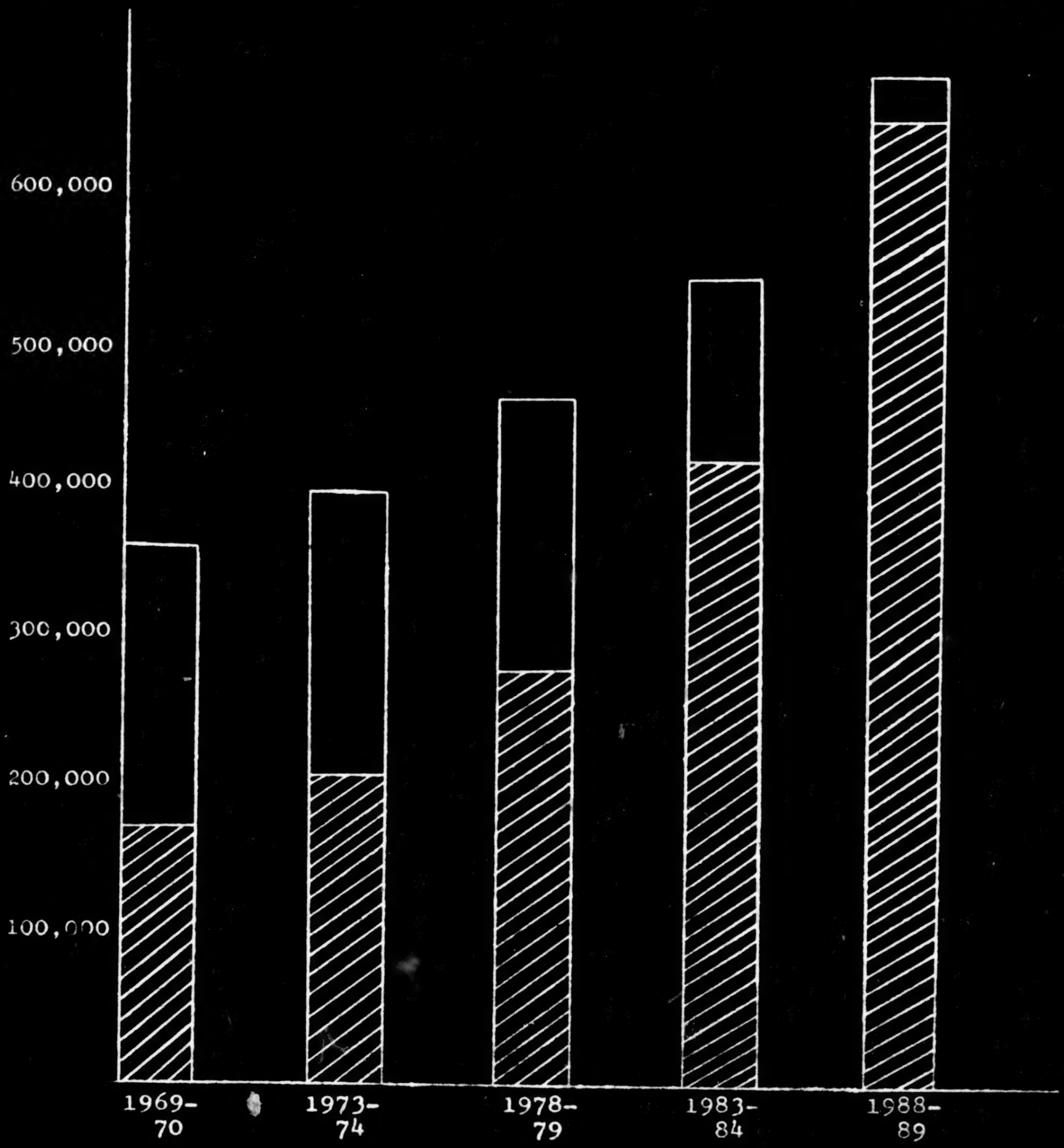
B. *Programme of Expansion.*

Education.

(i) *Basic Education (Primary).*

6. During the First Five-Year Plan, because of financial constraints and the over-riding priority given to expansion of secondary and higher education, it was not possible to provide for any significant relative expansion of Std. I Primary enrolment (i.e. the proportion of children of the appropriate age groups grew very little from the first to the fifth Plan year). Because of population growth the absolute numbers enrolled in Std. I showed an increase from 140,000 in 1964 to around 163,000 in 1969.

LONG TERM PRIMARY EDUCATION GOALS



ENTRY TO STANDARD I

☐ No. in Age Group

▨ No. Entering Standard I

7. During the Second Five-Year Plan, it is proposed to effect progressive increases in Std. I enrolments, taking into account not only the population growth (estimated at 2·7 per cent per annum 1967 to 1975, 3 per cent from 1975 to 1980 and 3·3 per cent 1980 to 1985) but also to increase the relative per cent of the primary age group for which primary education can be provided from rather less than 50 per cent in 1969 to Universal Primary Entry by 1989.

TABLE I

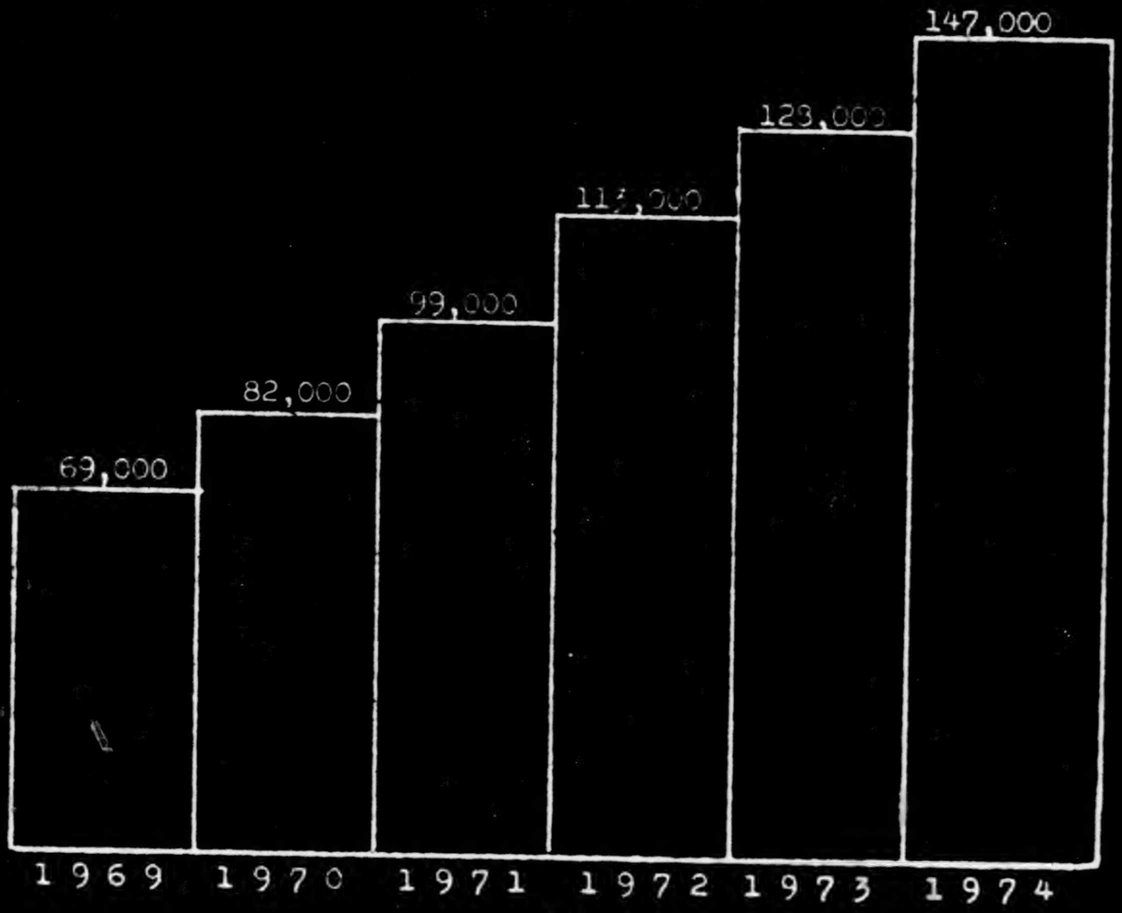
ENROLMENT IN PRIMARY SCHOOLS

YEAR	STANDARD I			STANDARD I-VII			PERCENTAGE OF AGE GROUP IN STANDARD I
	Boys	Girls	Total	Boys	Girls	Total	
1969/70 ...	100,384	71,101	171,485	517,994	332,926	850,920	47
1973/74... ...	119,282	89,088	208,340	674,196	465,863	1,140,059	52
1978/79... ...	154,385	124,367	278,752	899,147	676,892	1,576,039	60
1983/84... ...	221,639	198,480	420,119	1,222,415	1,009,600	2,232,015	77
1988/89... ...	325,661	326,986	652,647	1,771,114	1,633,546	3,404,660	95

8. It is also planned to increase enrolments in Std. V, to the point at which the Std. IV examination can be abolished. It is planned to do this by 1974. The last such examination will be held in 1973.

9. Each of these two developments (increase at Std. I and increase at Std. V) involves a heavy increase in costs, particularly in the recurrent budget, both in the coming Plan and in subsequent Plans. In order to achieve these targets maximum use is to be made of self-help efforts in the construction of School buildings. Also steps are to be taken to ensure that recurrent costs per student are kept at a minimum.

PRIMARY EDUCATION
Standard V enrolment



10. During the Second Five-Year Plan the curriculum of the primary schools will be changed, implementing the principles of "Education for Self-Reliance", providing the basic training required for life primarily in a rural economy.

TABLE II

CAPITAL AND RECURRENT EXPENDITURE—PRIMARY EDUCATION 1969/70–1973/74)

Recurrent Cost	
Net of Fees:	
1969/70	141,600,000
1970/71	153,645,000
1971/72	166,843,000
1972/73	180,634,000
1973/74	195,831,000
Capital Cost:	
1969/70	15,977,000
1970/71	20,899,000
1971/72	25,167,000
1972/73	27,402,000
1973/74	31,771,000
TOTAL ...	121,216,000

1. All calculations at constant prices.
2. All rural schools to be built with maximum of self help.

(ii) *Further Education (Secondary).*

11. Enrolment and outputs in secondary schools are planned at levels sufficient to meet the needs of the labour market for direct employment (and on-job training) in posts which require this educational base, to supply training schools for pre-employment training (such as primary teachers, agricultural extension workers, etc.), and to supply the pipelines to the University. Table II below summarises the approximate demand/supply picture for the five Plan years:

TABLE III

MANPOWER RECONCILLIATION

ITEM	Demand (Estimated Requirement)	Supply Form 4 Output Planned to meet Demand
Category A—Occupations	3,849	
Category B—Occupations	12,333	
Category C—Occupations	13,109	
Safety Margin (including provision for wastage from Form 5 through to University Graduation and from Category B Training Schools) (23 per cent)	8,050	
FORM 4 OUTPUT:		
Government Financed Schools		33,844
Private Secondary Schools		3,497
TOTAL ...	37,341	37,341

12. The item "safety margin" is substantially weighted by the heavy wastage of Form 6 (Science) outputs which will not be successful in qualifying for University entrance. They represent over 25 per cent of the total "Safety margin". The unsuccessful Form 6 outputs represent a substantial waste of educational investment since Forms 5–6 exist largely to prepare individuals for University entrance, and the failure of a large number to qualify greatly increases the output cost of each successful student.

13. In 1968 the number of students required to enter science faculties of the University to meet the schedule of yearly inputs necessary to reach the 1980 manpower target was 296. Only 254 Form 6 science sitters in 1967 actually passed. Worse still only 217 of these actually entered the University, leaving a total shortfall of 79. This was believed to be a freak year and it was expected this dip would be made up in 1969. In 1968 out of 490 HSC Science sitters only 247 or 50 per cent passed. The 1969 input requirements to University science faculties were 313, leaving another shortfall.

14. If these shortfalls continue in this order of magnitude through the 10 years of plan 2 and plan 3, the cumulative shortfall will be between 900 and 1,000 of the most urgently needed University level, science based, skills and the national goal of self-sufficiency by 1980 will fail of achievement in this crucial area by about 25 to 30 per cent.

TABLE IV

(a) SECONDARY DEVELOPMENT—FORMS I-IV

YEAR	No. of Forms I	Form I Entry	Form 4 Outputs
1969	203	7,110	6,421
1970	209	7,320	6,601
1971	215	7,530	6,820
1972	221	7,740	6,899
1973	227	7,950	7,103
TOTAL OUT-PUT ...	—	—	33,844

(b) FORM V & VI

YEAR	FORM 5 IN-TAKE		FORM 6 OUTPUT	
	Science	Arts	Science	Arts
1969	840	552	736	494
1970	936	552	819	538
1971	1,032	552	912	538
1972	1,128	552	1,006	538
1973	1,224	552	1,100	538
TOTAL OUTPUT ...	—	—	4,573	2,646

15. The heavy and increasing preponderance of "Science" over "Arts" during the Five Plan Years reflects Tanzania's most urgent needs for individuals in university level occupations which require a science/maths. foundation. It also reflects the unfortunate necessity, as noted above, to put through a large number of students through Forms 5 and 6 (Science) in order to produce enough H.S.C. passers qualified to enter university.

16. Owing to the high priority assigned in both the First and Second Five Year Plans, localization of the teaching staff of the secondary schools will be largely accomplished during the Second Five Year Plan. By 1977 the secondary schools will be staffed 100 per cent with citizens.

TABLE V

LOCALIZATION OF THE SECONDARY TEACHING FORCE

Year	Total Teachers Required	Total Citizens Available	Balance Non-Citizens
1969/70 ...	1,346	656	690
1970/71 ...	1,360	890	470
1971/72 ...	1,406	1,106	300
1972/73 ...	1,452	1,282	170
1973/74 ...	1,498	1,378	120
1974	1,545	1,465	80

17. Recurrent costs for secondary education will rise from Shs. 51,847,000 for the first year to Shs. 58,178,000 for the fifth years of the Plan, or an increase of about 15·8 per cent or about 3·0 per cent per annum compounded. One reason for this relatively moderate increase in recurrent costs is because of an unusually large output of graduate teachers from the University during this period entering at the bottom of the graduate scale, coinciding with a correspondingly large fall-off of expatriate elements.

TABLE VI
RECURRENT COST—SECONDARY
(Shilling)

Financial Year	Reccurent Cost Shs.
1969–70	51,847,000
1970–71	53,126,000
1971–72	54,574,000
1972–73	56,276,000
1973–74	58,178,000

TABLE VII
ESTIMATED CAPITAL COST OF DEVELOPMENT OF SECONDARY EDUCATION

Financial Year	Capital Cost (Shs.)
1969–70	23,377,500
1970–71	28,502,000
1971–72	18,405,100
1972–73	12,069,900
1973–74	4,887,000
Total, 5 years	87,241,500

18. It is difficult to compare these estimated costs with those of the First Five Year Plan, because of the large rise in construction costs after 1963/64.

(iii) *Language Programme.*

19. We are moving towards an educational system in which the primary level is conducted in Swahili, while secondary and advanced courses will be conducted in English. The decision to shift to Swahili as a medium of instruction in the primary schools was necessary, since only 10 per cent of Standard VII leavers go on to secondary education, while the rest require skills appropriate for the working world they enter—primarily in the rural areas.

20. However, the new situation gives rise to educational problems and serious social dangers. The educational problems will arise because children, on entering Secondary School, will now have to shift to study in a new language, at the same time as taking on a more difficult set of subjects. This problem will in part be handled by the special programme in English instruction being mounted by the Ministry of National Education for Secondary School entrants, outlined below.

21. The potential social implications are more profound; the division between Swahili education at the primary level and English education at the secondary level will create and perpetuate a linguistic gulf between different groups and will also tend to lend an alien atmosphere to higher education, making it inevitably remote from the problems of the mass of the society. As a permanent situation, this would not be tolerable. Particularly as government moves over to the complete use of Swahili it will become more and more inappropriate to have the secondary and higher educational system operate in English.

22. By the end of the Second Plan almost all Secondary School teachers will be Tanzanian. The major barrier to a shift to Swahili medium Secondary Education will be the lack of teaching materials in Swahili. This lack cannot be made up overnight; it will require a systematic programme of translation and creative writing over some years. Therefore, there must be long-term planning for such a shift, with adequate commitment of resources to prepare for the change ahead of the intended implementation, so that adequate materials will be available in Swahili for the student at that time. The problems involved in mounting this effort and the complexities that are likely to arise during the transition period are such that it will be subject to study by a specially selected team, who will prepare proposals for the timing of the necessary steps and lay out a programme for the preliminary stages.

23. This task may be seen as part of the larger need for Swahili development, which requires an increased effort in a number of technical fields, which it should be possible to mount as the number of Tanzanians qualified in the various technical disciplines increases.

24. An intensive study-skills course, "Learning through Language" has been designed and produced to help pupils over the transfer from Swahili to English medium. The course was produced by the English Language Panel and other subject panels of the Institute of Education. It aims generally to give pupils intensive exposure to the kind of English they need to use as a tool of learning all subjects in Secondary Schools, and to boost the pupil's confidence in his ability to succeed in Secondary studies.

(iv) *Teachers' Training.*

25. The training of teachers will be closely geared to the requirements of the schools during the Plan period. In the case of primary school teachers, this involves supplying such teachers (mainly Grade A) as are necessary to enable the Standard IV examination to be abolished in 1974 and such other teachers as will make possible progress towards Universal Primary Education. Table VIII shows the intake necessary during each year of the Plan to achieve this goal. The Plan includes provision for a new type of teacher, Grade D. These are teachers who have completed a primary school education and receive one year of training, preferably after completing national service. Opportunity will be given for such Grade D teachers to attend short courses and to qualify for up-grading to Grade C after three years in service.

26. In the case of secondary school teachers, training will be accelerated to make possible an early localization of the teaching force and emphasis will be placed on the training of science teachers. Steps are being taken to include courses for the training of specialist teachers of agriculture, domestic science, commerce and technical subjects. Special attention will be given to the pedagogical training of teachers at the Technical College. Table VIII lists the intakes into the University and Dar es Salaam Teachers' College training during the Plan period.

TABLE VIII

IN-TAKE INTO COURSES OF TRAINING AS TEACHERS

Year	Graduate		Diploma		Grade A	Grade C	Grade D
	Science	Arts	Science	Arts			
1969	70	77	70	30	1,200	240	–
1970	90	90	60	40	740	800	600
1971	90	90	60	40	740	1,000	700
1972	90	90	40	30	740	1,100	750
1973	100	90	40	30	1,000	1,100	750
1974	100	75	40	30	1,000	1,100	750

27. Owing to the importance of radical change in the function of the primary school, the Grade C course will be extended to three years. However, the first two years will be taken up wholly with work in the teachers' college without extended periods of block teaching practice, while the third year will be taken up with supervised teaching in schools in the capacity of pupil teacher. During the period of pupil teaching, students will receive a salary amounting to 80 per cent of the Grade C entry point, but on successful completion of this period they will become fully qualified Grade C teachers with a salary equal to the Grade C entry point plus one increment. Grade D teachers will be recruited so far as possible from among primary school leavers, who have done their initial period of full-time national service, while Grade A and E.O. III training will be fully integrated with national service.

28. The recurrent cost of training in teachers' college is estimated to rise as indicated in Table IX. These figures include provision for refresher courses for serving teachers, a development of considerable importance during the changes in the primary school curriculum, which are envisaged in this Plan.

TABLE IX

RECURRENT COST OF TRAINING IN TEACHER'S COLLEGES

Year	Recurrent Cost
1969–70	14,470,000
1970–71	15,964,000
1971–72	16,909,000
1972–73	18,125,000
1973–74	19,431,000

29. The capital cost of the teacher training programme is set out in Table X This programme involves the enlargement of three colleges to 400 students (Songea, Korogwe and Tabora), the establishment of two new colleges (Iringa, Mtwara) and certain detailed additions or adaptations at existing colleges. The building of further colleges at Singida, Musoma and Monduli will depend on the necessary capital funds becoming available. In general, Grade D training will be given at former Grade C colleges, while extended Grade C training will be combined with Grade A training at the existing major colleges.

TABLE X

ESTIMATED CAPITAL COST OF TEACHERS' COLLEGES

(Shillings)

Year	Capital Cost
1969–70	9,380,000
1970–71	11,946,000
1971–72	6,788,000
1972–73	3,926,000
1973–74	410,000
Total Five-Years	32,450,000

30. Special accommodation will be provided at Iringa Teachers' College for refresher courses for serving teachers. At the same time, premises formerly occupied by a seminary at Bagamoyo will be converted into a special college for refresher courses. Other short courses will be held in existing premises (teacher's colleges and elsewhere) in an endeavour to intensify the retraining of the primary school staffs in accordance with the principles enshrined in the Arusha Declaration. This retraining effort, including the supervision of pupil teachers, will be supplemented by the work of the District Education Officers (Inspectorate) and itinerant Teacher Educators.

(v) *Further Education—Technical Level (sub-professional).*

31. This section deals with various kinds of engineering technicians and draughtsmen, who at present are trained at the Dar es Salaam Technical College. Three distinct types of course are offered now: two for engineering technicians in civil engineering and in mechanical/electrical engineering respectively, and one for laboratory technicians in industrial research and university laboratories. The five year demand for these types of technicians is shown in the Table XI.

TABLE XI

DEMAND FOR TECHNICIANS, 1969–74

Occupation	Existing Vacancies	Net Increase in Employment	Wastage and Localisation	Total Demand
Draughtsmen, general	39	44	33	116
Engineering technicians, general	174	435	187	796
Engineering technicians, textile	9	25	24	58
Engineering technicians, petrol	1	7	2	10
Total, engineering technicians	223	511	246	980
Technicians, research labs.	6	12	6	24
Technicians, industrial labs.	4	47	9	60
Total, laboratory technicians	10	59	15	84

32. This section does not include technical training institutions (Category B occupations) conducted by Ministries other than Education (e.g., Agriculture, Local Government, etc). These are treated in the sections of the Plan dealing with those Ministries. The estimates for Form 4 outputs, however, include provision for supply to these other technician level institutions.

33. Courses in accountancy, management, business administration, etc., now conducted by the Dar es Salaam Technical College will be transferred to a new central institution (see Section D below), and the Technical College will be devoted solely to technical training. In addition, it is proposed to transfer the secretarial courses now held at the Technical College to a specialised institution at Tabora created for this purpose. Full-time and part-time day and evening work in technical subjects will increase in volume and variety at the Technical College as the demand from industry for specialized courses of training becomes more diverse.

34. In addition to technician training, plans are afoot to enlarge the scope of activities of the College of Business Education, an institution catering for middle-level management in commerce and industry and for the small entrepreneur. This institution, though at present operating on a small scale, occupies a key role in the development of economic life. It is hoped that it may be possible during the present Plan to extend training activities to the Swahili-speaking businessman. Extended activities will in part be developed in hired premises, but some extention to the College buildings will be necessary, notably to provide room for a library and a business machines room and some hostel accommodation.

(vi) *Further Education (University Level)*

35. For the purposes of the projections, university inputs and outputs are treated in two board categories only, i.e., Science/Maths. based faculties, and Arts based faculties. It is believed these are reasonably accurate because of the heavy expatriate replacement element in university level occupations. Specific

occupational requirements estimates (e.g., Civil Engineers, Veterinarians, Geologists, Doctors, etc.) will be found in the "Survey of the High and Middle Level Manpower Requirements and Resources for the Second Five-Year Development Plan".

36. Table XII includes needed inputs and anticipated outputs of Tanzanians to all universities. However, with Faculties of Medicine, Agriculture and Engineering coming on-stream during the Plan period, most of these will be enrolled at the University of Tanzania, but with some still enrolled in Nairobi and Makerere, and a few overseas.

TABLE XII

UNIVERSITY ENTRY AND OUTPUT

Year	Number of Students Qualified to enter		Number Offered places		University Output Anticipated	
	Science	Arts	Science	Arts	Science	Arts
1969–70	247	318	247	318	165	186
1970–71	456	380	436	360	192	259
1971–72	540	419	510	389	203	245
1972–73	611	425	581	395	198	286
1973–74	684	430	654	400	349	324
Totals ...	2,538	1,972	2,428	1,862	1,107	1,300

37. This table graphically illustrates the strategy for this level of education, especially the continued rapid acceleration of Science inputs. The fruits of the institutional base created in the First Plan make possible a large acceleration of outputs in the Second Plan, an almost 100 per cent increase in total output from the first to the fifth Plan years. The large inputs in 1971, 1972 and 1973 will be reflected in university outputs of between 800 to 1,000 each year during the early years of the Third Five-Year Plan beginning in 1974. All of these, in both the Second and Third Plans, will emerge equipped with specified skills needed for development and the replacement of "rented" expatriate talent.

TABLE XIII

TOTAL RECURRENT COSTS OF THE UNIVERSITY OF TANZANIA (Shillings)

Year	Costs
1969–70	23,080,000
1970–71	27,696,000
1971–72	31,475,000
1972–73	35,519,000
1973–74	38,492,000

TABLE XIV

COST OF BURSARIES AWARDED TO STUDENTS AT UNIVERSITIES IN KENYA, UGANDA AND ABROAD

(Shillings)

Year	Kenya and Uganda	Abroad
1969–70	6,104,000	900,000
1970–71	7,795,000	1,200,000
1971–72	6,368,000	1,800,000
1972–73	4,750,000	2,300,000
1973–74	4,420,000	2,700,000

TABLE XV

ESTIMATED CAPITAL COST OF DEVELOPMENT AT THE UNIVERSITY OF TANZANIA (Shs.)

Year	Capital Cost (Shs.)
1969–70	2,525,000
1970–71	11,142,000
1971–72	10,217,500
1972–73	5,850,000
1973–74	850,000
Total ...	30,584,500

38. During the Second Plan period, the University College, Dar es Salaam, will become the University of Tanzania. Following this, there will be a downward adjustment in recurrent costs. The total adjustment which will result is not known at this time. Table XIII reflects a projection of current cost levels.

(vii) *Adult Education.*

39. The main emphasis in adult education in this Plan period will be on rural development. It will include simple training in agricultural techniques and craftsmanship, health education, housecraft, simple economics and accounting, and education in politics and the responsibilities of the citizen. In rural areas, virtually the whole of this work will be conducted in Swahili. Literacy will be included in response to popular demand, as people become aware of its functional importance.

40. The needs of urban areas may be assumed in part to be met by existing organizations, notable by the University Institute of Adult Education, but there is room for the expansion of simple vocational classes, for which provision is not made by existing training institutions.

41. The characteristic feature of adult education is that various organizations participate. Among them are Government departments, TANU, UWT, the co-operative movement and the Churches. Part of the work to be done is the co-ordination and encouragement of existing activities and another part is the promotion of new activities.

42. The main limiting factor is the scarcity of experienced staff. Further, it will be impossible to devote capital funds to the building of new centres for adult education, during the Plan period and consequently full use must be made of existing premises. Fortunately, this necessity is unlikely to impede development.

Development Proposals.

43. The general principle is to place the main organising responsibility on the primary school. The school will then become a community educational centre, at which the provision of primary education is only one function. A school so conceived will increasingly become a focal point for the total educational needs of the community, rather than serving as a somewhat detached institution for the education of children.

44. The general responsibility for the adult education activities of the centre will rest with the headmaster.

45. It will be the duty of the headmaster to ascertain community needs to identify suitable instructors and to arrange classes. Each headmaster would have at his disposal a small grant for equipment and materials.

46. Instruction will be given by persons supplied by Ministries and organizations or by individuals in the neighbourhood who are competent to give instruction. The development of this programme will be phased over a number of years, building on experience as it is gained. Administrative, capital and recurrent costs will be minimized by making maximum use of the existing structure. The Institute of Adult Education will assist the programme by providing training for the cadre of education officer who will provide leadership for its development.

The Institute of Adult Education.

47. A word must be added about the special role of the Institute of Adult Education. Reference has already been made to the Institute's function in urban areas and to the training of adult education officers. As a body responsible for research, the Institute will also be well placed to follow up the developing programme outlined above and to assess its usefulness. But in addition to these important tasks, it is envisaged that the Institute will carry out a pilot project aimed at the establishment of a National Correspondence College, to serve literate but isolated persons throughout the country, who wish to enlarge their knowledge and understanding, particularly in subjects of importance to national development.

C. *Overseas Recruitment and Technical Assistance Personnel.*

48. Tanzania, in the First Five-Year Plan, adopted the policy of maintaining standards of qualifications for all posts in the upper skill levels. Since supply of Tanzanians with the requisite skills was (owing to a lack of development of secondary and higher education under colonial rule) far short of requirements, the only solution was seen to be in the renting of expatriate talent until properly trained and experience Tanzanians could be brought forward.

49. At the time of launching the First Five-Year Plan, it was estimated that it would be necessary as a minimum to recruit about 1,000 expatriates in the five Plan years (excluding teachers). This requirement was made up of estimated losses of then incumbent expatriates, net increase in posts and the filling of vacancies existing at that time.

50. It has not been possible during the First Plan to achieve this level of recruitment (although in the last year or two results have been much better than in the early Plan years).

51. Although in some areas requirements for the use of expatriate personnel will drop sharply during the Plan period, recruitment needs will remain great for certain specialized skills for which the build-up of Tanzanian manpower is a particularly lengthy process.

52. In order to ensure an adequate flow of technical manpower during the Second Plan recruitment efforts will be intensified, by placing recruitment officers in Tanzanian embassies, by allowing Ministries to recruit directly under the co-ordination of Central Establishment Division, and by seeking talent from a wider range of appropriate agencies.

D. *Programme for the Development and Training of Administrative, Management and Technical Personnel in the Parastatal Sector.*

53. Through its control of the parastatal sector Government has assumed responsibility for development of a large proportion of productive activity. The Plan, therefore, includes proposals for the development and training of technical management and administrative personnel necessary to fulfil the tasks of the parastatal sector.

54. Surveys are now under way to identify the specific nature and extent of the parastatal training needs.

55. Tentative estimates indicate that there are over 8,000 employees who will require formal training in clerical, secretarial, accounting/book-keeping, commercial and management subjects to standards varying from routine to professional level.

56. Based on experience in the public sector, a training commitment of these proportions will require extensive financial and manpower resources.

57. Rather than create a series of new institutions, it is proposed to create one large new institution, and rationalise the responsibilities of existing Government training facilities to create a two-tiered system catering both to Government and the parastatal enterprises (and probably to the private sector on a fee basis).

58. Under these arrangements clerical and lower executive training, including typing, would be performed at the Civil Service Training Centre for both public and parastatal sectors alike. The existing higher executive, accounting and management courses would be at a new institution, the Institute of Development Management, which will also accommodate the Institute of Public Administration and senior level courses for the parastatal sector.

E. *Labour Programmes.*

(i) *The National Industrial Training and Apprenticeship Scheme.*

59. It is the policy of Government that the reponsibility for industrial training lies with employers, but that Government will assist them in this process. This scheme has been established for this purpose.

60. The scheme will undertake to draft basic apprenticeship and training legislation, assist employers in organizing effective in-plant training schemes and in providing theoretical instruction off-job through block-release courses, day-release courses and part-time instruction in facilities provided by Government. The existing Trade Testing Centre is being intergrated into the over-all training scheme.

61. Training will be concentrated during the Five Plan Years in the following main groups of skilled trades:

Automotive;
Electrical;
Mechanical;
Building.

62. During 1969–70 the scheme aims at placing 120 apprentices in training, and this can be increased in the next four Plan years to 300 to 400 per year if the demand justifies it. These apprenticeships will vary between 3 and 5 years, depending on the trade involved.

(ii) *National Employment Service Development.*

63. The National Employment Service as a separate entity within the Labour Division (of the Ministry of Communications, Transport and Labour) is quite new. It currently has 22 professional staff (plus supporting clerical and other posts).

64. The NES will concentrate on establishing a strong placement/employer relations programme during the next five years. A total increase of 30 professional staff, plus related clerical and other costs, is proposed to be used for strengthening the placement programme and Labour's responsibilities in relation to the private sector localization programme.

(ii) *The National Institute for Productivity.*

65. The National Institute for Productivity will concentrate on eight basic courses during the Second Plan:

Industrial Engineering	Middle management, 400 participants.
General Management	Supervisory Staff, 500 participants.
Management Accounting	Accountants and staff employed in accountancy work, 250 participants.
Marketing and Sales	Sales personnel, 750 participants.
Personnel Management	Personnel Officers and Staff employed in personnel work, 800 participants.
Supervisory Training	Supervisory and Staff in charge of others, 1,200 participants.
Workers' Education	This activity will involve all membrs of workers' committees, 2,500 participants.
Productivity Information/Statistics	Research work involving about 40 industries a year. This Section will be involved with the work of Permanent Labour Tribunal.

66. Thus, NIP will have at least 6,400 course participants between 1969–74 in eight fields of study as shown above. In addition a large increase in consultancy work is planned, rising to about 450 cases per year.

(iv) *Expansion of the Factories Inspectorate.*

67. A change in the modus operandi of this programme is proposed. Previously, these inspection services had been carried out on a contract basis by individuals who were "approved" inspectors, on a fee and expenses basis. These have been paid by the inspected establishments.

68. This arrangement has not been very satisfactory, and it is proposed that inspections will, in the Second Plan period, be carried out by qualified civil servants subject to direct control and supervision by the Chief Factory Inspector. The costs of these services will be offset substantially by employer fees which will be paid to Government.

(v) *National Provident Fund.*

69. During the Second Five-Year Development Plan, it is proposed to introduce a number of social security measures:—

(1)—(a) The National Provident Fund Scheme, which now covers all employers with 4 or more employees, will be extended down to and including employers employing one worker.

(b) It is also proposed to amend the National Provident Fund Act so as to make it possible for self-employed persons to join the Fund on a voluntary basis either individually or through their co-operative societies.

(c) Towards the end of the Second Five-Year Development Plan, it is proposed to introduce an Invalidity and Age Pension Scheme for those members of the National Provident Fund who retire at the age of 60 years or become invalid and have contributed to the National Provident Fund for a minimum of 10 years. This pension will be paid out of the Reserve Account of the Fund which now stands at Shs. 10,000,000/-. The proposed pension will be over and above the age or invalidity benefit provided for under the National Provident Fund Act. The amount of the pension will be determined in the light of the size of the Reserve Account and the estimated number of beneficiaries.

(2) A completely new project is proposed to be undertaken during the Plan period. The Workmen's Compensation Scheme which is based on employers' liability and which provides lump sum benefits, will be replaced by a more sophisticated Employment Injuries Insurance Scheme. The scheme will be financed entirely by contributions by employers. It will provide periodical benefits in the form of pensions. This type of scheme affords a more adequate social protection than the workmen's compensation scheme.

CHAPTER XI

HEALTH

A. *General Outline.*

The principal objectives in medical development are to bring about a society of healthy Tanzanians, in which the individual has a reasonable prospect of survival through childhood and normal adult years, free from the incubus of infection or preventable disorders and able to obtain medical aid when he needs it. These objectives will be pursued through a co-ordinated, and increasingly integrated, national health service, utilizing to the full the facilities made available by the central government, the local authorities, and the voluntary and other agencies.

2. During the First Plan effort was directed towards the development of physical medical facilities, mainly located in urban centres. New foundations were laid and others were strengthened in medical education, and in regional and district hospital services. However, there was little significant vertical development in health, and no break-through was achieved towards solving many of the major health problems facing Tanzanians.

3. The Second Plan will increase emphasis on the development of preventive and rural health services, mainly through the agency of rural health centres. One important intention during the Second Plan, therefore, is that the central government construct and manage many new Rural Health Centres, and assume full responsibility for Rural Health Centres and partial responsibility for District Council dispensaries. The financing of the takeover of the existing Rural Health Centres will have to be worked out in accordance with yearly progress in utilization of allocations.

4. During the First Five-Year Plan only 2·2 per cent of the total Central Government development capital was allocated to health, while only a small proportion of this allocation was implemented. Pressing demands from other sectors severely limited resources the government could make available for health development. The Second Plan increases allocations of development resources given to health and provides for a favourable rate of growth of recurrent spending. An annual increase of about 8 per cent in the recurrent budget, including expenditure resulting from development, is planned. By 1974 the total recurrent government health budget will be in the order of 134 million shillings.

B. *Public Health Programmes.*

5. The objective of the public health serivce is to combat common preventable disease. This improves the health and productivity of the community and reduces the work load of over-burdened hospitals. It is the most economic point at which the health services can help to interrupt the vicious circle of disease, poverty, and ignorance.

6. The priorities in preventive medicine are: —

(a) Better nutrition—especially for children.

(b) Better environmental sanitation—especially water supplies;

(c) Better maternal and child health.

(d) Better control of communicable disease—especially chronic disabling conditions like tuberculosis, leprosy, etc.

7. The existing skeleton network of dispensaries and health centres provided by Government, local authorities and voluntary agencies are not able to undertake more than simple treatment of minor ailments and injuries. To make these units effective in the prevention of disease requires changes in staffing, financing and administration, and in support from specialized central units. Seven inter-related projects designed to implement development along these lines are outlined in the following pages.

(I)—RURAL HEALTH SERVICES

(a) *Rural Health Centres.*

8. The focal point of an effective rural health service should be a Rural Health Centre, serving a population of approximately 50,000. The function of a Rural Health Centre is to provide supervision of dispensaries in its area and to organize preventive campaigns such as nutrition education, environmental sanitation, maternal and child health services, immunisation, etc. It consists of relatively simple buildings for handling out-patients, maternal and child welfare clinics, a maternity unit, and holding beds. The medical nursing and health staff need appropriate training, and supervision and transport if they are to act as a catalyst for improving health in the district.

9. The existing arrangements by which there is a division in capital costs between central and local government, and where recurrent financial responsibility lies with local authorities while professional supervision is a central government responsibility, has not worked well. Few Rural Health Centres have been built and many of those that exist are only functioning in the limited capacity of a rural out-patient department. The Central Government will therefore take full responsibility for all Rural Health Centres.

10. The target of one Rural Health Centre, with about five satellite dispensaries per 50,000 people means that 240 centres are required to meet the current need and about seven more per year to allow for a population increase of 350,000. There are almost fifty now, leaving a deficit of nearly 200. It is intended to establish 80 new health centres during the Plan period, reducing the deficit to 155. If over 100 could be established during each subsequent Five-Year Plan period, the target coverage will be reached by the mid-1980s. May existing government dispensaries will be improved to function as Rural Health Centres.

11. The cost of constructing the health centres and necessary housing is currently estimated at 300,000/-, and the equipment, including transport a further 40,000/-. The recurrent costs of existing rural health centres are approximately 80,000/- per year each, but if properly staffed and provided with transport to operate more effectively it is estimated that the costs will rise to 120,000/- per year.

(b) *Dispensaries*.

12. The rural health centre system of medical care depends on the existence of dispensaries providing service for communities of approximately 10,000 people. There are at present approximately 1,200 dispensaries, i.e. about the required number. The quantity is therefore, more or less satisfactory, but the quality is poor. A dispensary requires adequate facilities, staff and recurrent budget for drugs. Bringing these up to a reasonable standard will be the responsibility of local authorities. The Ministry will lay down minimum standards to which any grants in aid will be tied, and will be responsible for the training of appropriate staff. The Central Government will seek to ensure that the District Councils have the financial resources to substantially improve the operation of the dispensaries during the Plan.

(c) *District Staff*.

13. The supervision of health centres, dispensaries and public health programmes has been the responsibility of the District Medical Officer. The acute shortage of doctors combined with the increasing population and further increasing demand for medical care has made it extremely difficult for District Medical Officers to fulfil this duty, and the services have suffered in consequence. Towards the end of the Plan period the increase in staff, both doctors and health officers, resulting from present training programme should make its first impact. It is a high priority to re-establish this supervisory function.

(d) *Mobile Services*.

14. In the absence of rural health centres a start can be made in providing preventive services by augmenting the district staff with mobile teams concerned with nutrition, immunization, environmental sanitation, and simple treatment of urgent cases. As rural health centres develop these teams will be integrated into them.

(II)—NUTRITION SERVICES

15. Malnutrition is the underlying cause of much morbidity and mortality in children. Severe malnutrition in childhood leads to physical and possibly mental stunting in adults.

16. The development of the Ministry's nutrition services (in co-operation with activities of TANU, other national bodies, and other ministries co-ordinated by the National Nutrition Committee) is essential. It is intended to extend and intensify the nutrition services, which have begun activities in six regions, to cover the whole country. The services are provided by mobile district teams operating under the direction of a regional nutrition officer or an assistant medical officer, supported by the central Nutrition Unit in Dar es Salaam.

(III)—ENVIRONMENTAL SANITATION

17. Environmental sanitation—safe water supplies, excreta and waste disposal, food hygiene, housing, and certain measures for the control of communicable diseases—is currently the responsibility of the 64 health officers in government district health services and 34 local authority health officers in urban areas. The number of health officers available at the end of the Plan period will be increased to some two hundred.

18. In the rural areas the role of the health officers has been predominantly advisory. They visit, inspect, report to and advise District Councils. Except for malaria control and smallpox vaccination they did not have sufficient opportunity to promote development in their sphere of competence in a positive way. It is intended to make their role in the rural areas more executive by providing them with the necessary funds and tools for environmental sanitation, particularly the provision of water latrines at market places, etc. It is not intended to take over the responsibilities of local authorities or other agencies in this field but rather to encourage demonstration and education projects directly related to improving public health. To promote this change a central environmental sanitation unit will be established.

(IV)—MATERNAL AND CHILD HEALTH

19. The concept of Maternal and Child Health spans many disciplines and provides services for two large and vulnerable groups of the population—children and child bearing women. These include ante-natal clinics, delivery service, post-natal and child welfare clinics in which nutrition and immunization programmes may be incorporated.

20. Development and co-ordination of these services is best accomplished by a doctor, with special child health and/or public health training, based at a paediatric ward in a regional hospital. Some nurses will receive post-basic training in public health. They will later be able to provide leadership and supervision of other nursing staff in maternal and child health services. In addition the basic training of health nurses will be resumed.

(V)—COMMUNICABLE DISEASE CONTROL

21. Some of the major communicable diseases, especially those causing chronic disability such as tuberculosis and leprosy or epidemic diseases like smallpox and sleeping sickness, require special control measures over and above the general services for all diseases. A watch also needs to be kept for changing disease patterns.

22. It is therefore proposed to establish a central unit for communicable disease control, pooling the resources and co-ordinating the activities of various specific disease programmes. Contributions to specific disease control programmes are currently provided by central government, local authorities, voluntary agencies and also by international agencies. It is proposed that the various contributions should continue with increased professional and administrative guidance and support from the Communicable Disease Control Unit, which will also be strengthened by a new Epidemiological Unit. It will be a function of the former unit to promote all forms of immunisation and to hold the necessary stocks of vaccine.

23. The main function of the Epidemiological Unit will be to organize and undertake health surveys to provide more accurate health information.

24. These two new units, together with the Health Education, Nutrition, and Environmental Sanitation Units, will eventually form the basis for a Public Health Institute.

(VI)—HEALTH EDUCATION

25. Health education of the public is part of the function of every health worker. The role of the Health Education Unit is in training health staff and other teachers and community development staff, supplying equipment and conducting special activities such as radio programmes. The Unit is well established and during the Second Plan period it is intended to—

(1) extend its training activities to the staff of health centres and mobile units;

(2) increase activities in co-operation with other Ministries; especially National Education, Regional Administration and Rural Development, and Information and Tourism;

(3) further develop the central unit to meet these responsibilities.

(VII)—OCCUPATIONAL HEALTH

26. Compared with the number of self-employed farmers, the numerical strength of wage-earning workers in Tanzania is small. However, the safety, health and welfare of these employees is of the utmost importance to productivity. This aspect of preventive medicine is centrally the joint responsibility of the Health and Labour Ministries.

27. Most wage-earners work in evironments containing hazards of injuries or occupational disease. In 1967 alone there were 6,775 compensatory cases under workmen's compensation legislation, involving payments of compensation and a loss of 140,000 work days.

28. Occupational health services consist of the regulation of working conditions and environments, and the enforcement of these regulations by periodic inspection of working places by the Labour Ministry.

29. All employers are required to provide certain medical facilities varying from simple first-aid kits for small employers, up to dispensaries and hospitals in the largest ones. There are seven hospitals and 211 dspensaries (total 1,237 beds) employing 575 medical personnel of various grades maintanied by employers.

30. The Health Ministry is responsible for periodic inspection, supervision and advisory services to employers concerning medical facilities and general sanitation. This includes identifying occupational diseases, industrial poisons, etc., and prescribing for their treatment.

31. During the Second Plan an Occupational Health Unit will be established within the headquarters of the Health Ministry. This unit will consist of an industrial hygiene laboratory, a reference library, training facilities for medical and health auxiliaries, and a mobile industrial health education service.

32. The Unit will be directed by an industrial physician, who later will be assisted by other occupational health specialists. Its main functions will be to conduct research and provide technical advice in occupational health, and to teach occupational health to medical and paramedical personnel. One mobile field unit will be established.

C. *Hospital Services.*

33. Resources allocated to the Health Division have been sufficient for no more than a holding operation to relieve suffering and no significant improvement in stardards or replacement of expensive equipment was possible during the First Plan period. During the Second Plan period a specific allocation of development funds is to be devoted to the improvement of government hospital services. At the same time, a modest allocation of available resources is to be directed towards essential expansion of these services.

(I)—GOVERNMENT AND VOLUNTARY AGENCY SERVICES

34. One of the principal aims in medical development is to achieve a co-ordinated national health service, utilizing to the full the facilities made available by the central government, the local authorities, and the voluntary agencies. This Plan period will amphasize the importance of all health development plans being co-ordinated. During the First Five Year period progress was made in the co-ordination of government and voluntary agency services when five voluntary agency hospitals assumed the role of District Hospitals in certain districts where government was unable to provide hospitals directly. The ultimate objective is complete intergration of government and non-government health service under a Unified Medical Services. During the Plan additional voluntary agency hospitals will be utilized as district hospitals. Subsidization of other voluntary agency hospitals will continue.

(II)—DISTRIBUTION OF HOSPITAL SERVICES

District Hospitals.

35. There is an obvious need to spread evenly limited hospital facilities, so as to make them equally accessible to people in all districts. This means that small hospitals will continue to be an accepted necessity in a remote and inaccessible part of a district, in addition to the main district hospital. It also means that no district hospital should be enlarged to the optimum size of 200 beds or more, unless there is definite need for such expansion. However, small one-doctor hospitals are inefficient, district hospitals of 200 to 250 beds staffed by at least three doctors being much more satisfactory. This size will not be generally achievable during the Second Plan. New District hospitals will be built in districts in which there are only meagre or no hospital facilities, and small district hospitals situated in populous districts will be expanded if necessary to the minimum of 100 to 120 beds, with at least two doctors.

Regional Hospitals.

36. Replacement of three regional hospitals (Shinyanga, Musoma and Dodoma) will commence during the Second Plan. This had been planned previously for Shinyanga, and must occur at Dodoma and Musoma because the existing hospital sites there are unsuitable for improvement.

37. Increased development funds and efforts will be expanded in establishing in select medical zones more supra-regional reference (consultant) hospitals with specialist units. The new consultant hospitals at Moshi and Mwanza will be completed before the end of 1970, and others are planned for Iringa and Mtwara. Both the Dar es Salaam and Tanga Hospitals have assumed teaching functions and therefore programmes of expansion and modernisation are urgently required.

38. For the improvement of existing hospital services, Shs. 500/- for each Government hospital bed is to be provided out of development funds. The improvements arranged under the scheme will include slight alterations and extensions to buildings and purchase of new laboratory and hospital equipment, for which the recurrent allocations are not sufficient. Funds will also be spent to replace X-ray equipment and modernize kitchen and laundry equipment.

(III)—PSYCHIATRY

39. The provision of regional psychiatric wards will be expanded during this Plan. Not only will such wards relieve the pressure on Mirembe Mental Hospital, but they will enable psychiatric patients to be treated more humanely, more cheaply, and with less disruption of their lives. The wards will also serve as Mental Health Centres with beds for patients needing in-patient care, facilities for out-patient treatment, and facilities for the promotion of mental health and prevention of mental illness in the surrounding communities. During the Second Plan the target will be to establish them at most regional hospitals with the large and remote regional hospitals having priority.

(IV)—TUBERCULOSIS AND MATERNITY BEDS

40. As a design is now available for a multi-purpose ward which is preferable to special wards, it is therefore unnecessary to plan for special tuberculosis or maternity beds. Rather, it is envisaged that every hospital, especially those hospitals with a total of at least 80 beds, will allocate sufficient beds both for tuberculosis patients and maternity patients.

41. Considerable reliance was in the past placed on tuberculosis beds in establishing and operating tuberculosis control schemes. More emphasis will be placed on organising control schemes comprising out-patient treatment with short-stay in-patient care, and B.C.G. vaccination. Such schemes will only require a minimum of tuberculosis beds and should not be entirely dependent on them.

(V)—URBAN OUT-PATIENT CENTRES

42. These centres are intended to function as "screens" for the hospitals which they serve. The principle of protecting busy hospitals with out-patient departments sited at a distance from the hospitals is recognized, but is not paramount unless the existing out-patient building is outmoded and the number of out-patients is high. When a new out-patient centre is established away from in-patient facilities, arrangements will be made for doctors to work in the out-patient centre for a minimum number of hours every day so as to avoid the isolation of such centres from professional care and guidance.

(VI)—FLYING DOCTOR SERVICE

43. A big problem exists in mainland Tanzania in transportation and telecommunications between dispensaries, and rural health centres on one hand, and district hospitals on the other; and between peripheral hospitals and reference hospitals. Some units are inaccessible for several months during the rainy season, while it is often very difficult to obtain specialist help in an emergency occuring at an isolated hospital. For all these reasons the possibility of a Flying Doctor Service has been under consideration since 1959. The impediments to the development of this kind of service have been mainly financial. The African Medical and Research Foundation, however, has been operating a Flying Doctor and

Ambulance Service for several voluntary agency hospitals in Tanzania. This service is based in Nairobi, and therefore has not achieved a close integration with the national health services in Tanzania. More recently this Foundation has established a similar service based at Arusha for the supervision of rural health services in the northern part of Tanzania. A project to extend this service is therefore being included in the 1969/74 programme.

(VII)—INSTITUTIONAL HOUSING FOR STAFF

44. As hospitals employ a large number of staff, some of whom have to work day and night, it is necessary to provide adequate living accommodation for these staff, especially where hospitals are sited away from towns. A building programme will be implemented.

(VIII)—SUMMARY

45. The proposals for the development of hospitals services may be summarised as follows:—

(a) New district hospitals and additional wards at district hospitals to be established according to need and to satisfy minimum standards;

(b) New or replacement regional hospitals and additional wards at regional hospitals to be built according to needs;

(c) Psychiatric wards to be provided at most regional hospitals;

(d) Four consultant hospitals with specialist medical units (e.g. for eye disease) will be established at existing medical centres, two nearing final completion and two now at the preliminary planning stage.

D. *Training Programme.*

(a) *Introduction.*

46. The long term general objective of achieving self-sufficiency in manpower by 1980 sets the pace in medical education. The 1964/69 period was utilized in establishing sound foundations for general progress towards this objective.

47. The aim will be not only to increase the supply of trained personnel at all levels but also to improve the efficiency of staff who are already employed. To this end seminars, refresher courses, and in-service training programme will be stressed. By the end of the 1969/74 period, a substantial advance will have been made in building up Tanzania staff.

(b) *Medical Practitioners (Registered).*

48. At the end of 1968 there were 441 registered medical practitioners in Tanzania:—

In public service	126
With voluntary agencies	101
In private practice and miscellaneous ...	214
	441

49. The following table shows the number of citizens training to be doctors in East Africa and overseas.

Table I

Year of Graduation	Faculty of Medicine Dar es Salaam	Makerere	Overseas	Total
1968	6	27		33
1969	9	35		44
1970	22	20	15	47
1971	13	28	20	61
1972	29	33	Not known	(62)
1973	(30)	(30)	Not known	(60)
1974	(30)	(30)	Not known	(60)

Figures in brackets show estimated input and output only.

50. *Undergraduate*: The number of Tanzania medical graduates has risen from 35 at the beginning of 1964 to 74 now (including 27 doctors who graduate in 1969 from Makerere and Dar es Salaam). Now that a Faculty of Medicine has been established in Dar es Salaam in addition to the Medical Faculty at Makerere, Tanzanians have at their disposal local training facilities up to a maximum 60 student admissions per year. It is intended to expand the capacity of the Faculty of Medicine to an annual intake of 90 students by 1974. Subject to this expansion the present local capacity for training Tanzanians to be doctors is satisfactory.

51. *Internship*. The present system of internship consists of a 12 months attachment to a recognized hospital for practical training under the tutelage of a specialist. These arrangements do not sufficiently equip doctors with the practical skills and experience that they will need in order to discharge their duties efficiently. Steps will be taken to review the training arrangements for interns.

52. *Post-graduate:* There will be an expansion in post-graduate and specialist training during the Plan. Post-graduate training has been handicapped by the small numbers of Tanzanian doctors. Nevertheless, 19 Tanzanian doctors completed training in overseas countries for higher qualifications during the 1964/69 period, and ten others are still pursuing post-graduate studies. With the increasing annual out-puts of Tanzanian doctors it will be feasible during the 1969/74 period to intensify the post-graduate and specialist training programmes. Assistance of overseas countries will still be utilized and Tanzania will co-operate with the other East African countries in starting joint post-graduate training schemes, particularly in public health and pediatrics.

(c) *Medical Auxiliaries*.

53. The use of *Assistant Medical Officers* as licensed medical practitioners began in 1961 when it was decided to up-grade selected medical assistants to this cadre after completing a nine month additional course successfully. There are now 92 licensed assistant medical officers in the organized health services and thanks to them these services have been maintained at a satisfactory level. It is intended to resume the up-grading courses which were suspended recently owing to a lack of teaching staff.

54. The present number of *medical assistants* in the national health services is 290, only one-quarter of the numbers required. Many more will be required to man the new rural health centres.

55. Until recently only Bumbuli Medical Assistant Training Centre was training Medical Assistants. Some 15 qualify each year of whom about half are former Rural Medical Aids who take a two year up-grading course.

56. In 1968 the Government re-established a Medical Assistant Training Centre at Tanga with an intake of 22 students. This school has a capacity to train 30 Medical Assistants annually. The first output will be in 1970.

57. These two schools will not be adequate for Tanzania's needs and it is therefore proposed to establish two new training centres (including one at the Mwanza Hospital). Total training capacity for medical assistants by 1974 will increase to 90.

58. At present there are 450 Rural Medical Aids in Tanzania. Many more are required.

59. Four new training schools for Rural Medical Aids will be started. By 1974 the training capacity for this cadre will increase from 30 to 150 per annum.

60. A new cadre of village medical helpers will be trained to man village health services on a self-help basis especially in established ujamaa villages. This cadre will not be involved in paid employment in the health service.

(d) *Nurses.*

61. Two grades of nurses wil continue to be trained, Grade A for girls and boys who have completed Form IV, and Grade B for those who have completed primary education.

62. *Grade A nurses* are trained in Dar es Salaam at Muhimbili Hospital where the annual out-put averages 40. There are about 400 Tanzanian Grade A nurses. In order to improve the nursing services, the training facilities for this cadre will be increased by establishing two new schools in the new Moshi and Mwanza Hospitals. These schools will raise the annual output to 120 by 1974.

63. *Grade B nurses* are trained at 14 voluntary agency hospitals at the rate of about 200 a year. As this number is not quite sufficient to satisfy existing demand, training facilities for this cadre will be expanded by establishing one or two new schools and by utilizing existing facilities more fully. It is also intended to re-establish three Government nursing schools at the Grade B level: a general nurse and health nurse school at Tanga, and a psychiatric nurse school at Dodoma. The general nurse school is intended to cater for the up-grading of serving nursing assistants, while the health nurse school will cover basic training in public health nursing. The present scheme of combining psychiatric and general nursing training has not proved satisfactory. The proposed separate school for psychiatric nurses will train ten students in a three year course.

64. Overseas countries will continue to be utilized in post-basic nursing training. However, shortage of nurse tutors and public health nursing officers is such that Tanzania must no longer rely on overseas countries, especially as the entry conditions demanded by those countries are unrealistic and now Tanzania has its own medical faculty. With the assistance of the University College, it is intended to establish a school for nurse tutors and public health nursing officers.

(e) *Ancillary Staff.*

65. Local training facilities are available at the professional level for Health Officers and Laboratory Technicians. The present annual output of Health Officers (20 to 25) is satisfactory. On the other hand the present annual output of Laboratory Technicians is not more than 12, and this is not enough. It is intended to expand the training facilities for Laboratory Technicians by utilizing the facilities of the future Central Pathology Laboratory in Dar es Salaam and the existing Veterinary Laboratory at Temeke. For both cadres an East African qualifying examination has been arranged to replace the previous qualification which was based in London.

66. Local training schemes and qualifying examinations for Health Auxiliaries and Laboratory Auxiliaries will also continue. These apply to persons who have completed primary education whereas completion of Form IV is necessary for entry to the Health Officer or Laboratory Technician training schemes.

67. Only a few Radiographers, Pharmacists, and Dentists are required for the national health service. Tanzania will continue to depend on outside institutions for the necessary training of these cadres. Local schemes however, are available to train auxiliaries in these cadres.

68. Another important ancillary cadre is that of hospital administrative assistants. Most of the present ten officers in this cadre have had no formal training, having been recruited directly or promoted from the clerical officer cadre.

69. A local training scheme will be established for this cadre, to include a one year in-service programme for serving officers in the clerical cadre, and a two year pre-service training programme with Form IV entry.

(f) *Training Grant to Voluntary Agencies.*

70. A matter of some concern is the current system of grants paid by Central Government to voluntary agencies for their training of Rural Medical Aids and Medical Assistants. The procedure by which these agencies are given grants for the training of successful candidates will be reviewed since present practice fails to encourage the voluntary agencies to expand a much needed service.

(g) *Seminars, etc.*

71. Emphasis will also be placed during the 1969/74 period on continuing medical education, particularly on seminars on rural health services and refresher courses for all medical staff. In addition, seminars will be held for political and other national leaders, to enable them to assist health education of the public more directly.

(h) *Ancilliary and Special Services.*

72. The services considered under this programme include Pharmacy and Supplies, Dental Service, Chemical Laboratory, Medical Laboratories and Mental Settlement Villages.

(i) *Medical Stores and Supplies.*

73. The Central Medical Stores are operated by the Supplies Officers, supported by 58 stores officers and assistants. The main development during the First Five-Year Plan period was a change over from the Allocated to the Unallocated stores system, the latter system having the main advantage of being without upper limits for stocks of purchased supplies which can be held in the Central Medical Stores. Partly because of the changeover and partly because of the expansion of health services, the value of purchased supplies issued annually from the Central Medical Stores has been increasing steadily. The purchasing process will be reviewed to ensure a system in Tanzania's best interest.

74. In addition to the receipt, storage and issue of purchased items, the distribution of UNICEF supplies and free gifts from various countries is undertaken by the Central Medical Stores. These gifts increased during the First Plan, and have caused an urgent necessity for the expansion of the Central Medical Stores storage space and staff. At the same time, it is necessary to employ more stores staff in order to ensure the proper accounting for supplies issued to regional medical services. During the Second Plan period, it is intended to strengthen their numbers at the large regional units. A total of 10 extra stores assistants or officers will be required for the regional services, in addition to 6 stores officers required for the 2 new warehouses.

(ii) *Pharmacy.*

75. The main function of this branch has been to man the hospital pharmacies or dispensaries and to dispense medicine to patients attending Government hospitals. The main development during the First Five Year period was in the training of a new cadre of 60 Dispensing Auxiliaries and the provision of a new post of Inspector of Drugs. A gradual expansion of the staff establishments will be necessitated by expanding services during the 1969/74 Development Period.

76. The total annual value of purchased supplies exceeds 10 million shillings, 65 per cent being drugs and 35 per cent dressings and equipment. With the exception of some hospital equipment, most of the drugs and equipment are manufactured and prepared outside the country. It is proposed to establish a tableting machine and an intraveneous solutions plant in the Central Medical Stores during the 1969/74 Plan. A unit for the local production of vaccines will also be established.

(iii) *Chemical Laboratory.*

77. The Government Chemical Laboratory is responsible for general public analytical work for medico-legal examinations; toxicology; and drugs, and water investigations. In addition to routine work, the laboratory is becoming increasingly involved in research work in human nutrition and in indigenous medicines. The total number of samples analysed in the laboratory has increased steadily from 3,420 in 1964 to 5,505 in 1967, an increase of 61 per cent. It is planned to increase the staff slightly, both at the graduate and auxiliary levels, and to build a new laboratory to replace the existing collection of outmoded huts.

(iv) *Medical Laboratories.*

78. The medical or pathology laboratory services can be divided into two parts—the Central Pathology Laboratory, and the clinical laboratories with which each regional and district hospital is equipped.

79. A new central pathology block is under construction at Muhimbili Hospital, Dar es Salaam. When completed the new Central Pathology Laboratory will play a triple role; as medical laboratory for Dar es Salaam hospitals, teaching laboratory for doctors and technicians, and reference laboratory for the whole country.

80. There are two types of clinical laboratories: a higher grade which is attached to regional hospitals, and a lower grade which serves district and other hospitals. In the 1969/74 programme it is planned to provide five regional hospitals with suitable laboratories which they do not have at present. These regional laboratories will provide a full range of laboratory facilities except histopathology, and except bacteriological culture initially.

(v) *Dental Services.*

81. The Government dental services are operated by the Principal Dental Surgeon, who is assisted by 6 dentists, 16 assistant dental officers and 6 dental technicians. During the Second Five-Years period it is planned to increase the establishment of dental surgeons to 10, of assistant dental officers to 24, and of dental technicians to 10 Five new dental units will be established at five regional hospitals.

(vi) *Psychiatric Services.*

82. The importance of providing psychiatric wards at regional hospitals, in order to enable more immediate and local treatment, has already been indicated. These wards in themselves, however, cannot remove the need for more facilities for chronic illness. There are two existing institutions for chronic cases at Irente and Litundi in Lushoto District. It is planned to expand both institutions, and also to establish three mental settlement villages.

TABLE II

AN OUTLINE OF MEDICAL DEVELOPMENT

Actual Expenditure 1962/63 to 1967/68 (in millions of shillings)

	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69 (Estimated)
Capital Development	1·2	3·1	1·6	2·5	1·3	7·6	6·2
Recurrent	49·7	52·6	53·0	60·7	61·6	66·7	68·4
Total ...	50·9	55·7	54·6	63·2	62·9	74·3	74·6

Planned expenditure 1969/70 to 1973/74 (in millions of shillings)

	1969/70	1970/71	1971/72	1972/73	1973/74
Capital Development	14·7	13·8	25·7	21·3	17·6
Recurrent*	97·0	105·5	115·0	124·5	134·0
Total...	111·0	119·3	140·7	145·8	151·6

Capital Allocation between Programmes 1969/70 to 1973/74 (in millions of shillings)

Public Health	31·0
Training	2·4
Hospital Services	55·3
Ancillary and Special Services	4·0
Total ...	93·1

*The very high expansion of total recurrent expenditure between 1968/69 and 1969/70 is due to three factors: (1) considerable extra recurrent costs resulting from new capital development; (2) allocations transferred from the Ministry of Regional Administration and Rural Development for partial subsidization of District Council dispensaries; and (3) inclusion in the expenditure figures of income received as appropriations-in-aid.

CHAPTER XII

URBAN DEVELOPMENT

A. *Strategy.*

(i) *The Pattern of Regional Development.*

The need for a strategy of systematic regional development arises from the wide dispersal of population. If the people of Tanzania lived in one major area, spreading out in a dense residential pattern from one centre, it would be possible to allow development to concentrate at that centre, with the expectation that the stimulus would spread throughout. There are, however, eight or nine concentrations of population, separated from each other by extensive tracts of sparsely populated countryside.

2. Development must be brought to each of these areas. However, such development will not come automatically. Uncontrolled economic tendencies lead to a heavy geographical concentration of development. Signs already exist that this process is under way in Tanzania. The danger is that "development" in Tanzania could be exclusively concentrated in one or two areas, leaving the other areas stagnant or even in decline. In many countries, the process of so-called "development" has led to a dual economy, the centre of which grows, attracting a lion's share of capital investment, and acting as a magnet to attract the ambitious from peripheral areas; development occurs only in this geographical enclave and may even be destructive to the other areas.

3. The Arusha Declaration has recognized this danger, and has offered the strategy of rural development as an alternative.

To strike at the roots of the problem, however, policy will be extended beyond a general emphasis on rural programmes to a specific strategy for regional development, which incorporates not only a specifically rural element, but which also incorporates an urban development programme consistent with the regional objectives. The pattern of rural development not only results from what is attempted in the countryside, but is also in part a response to the nature and location of urban growth. A firmly defined and energetically implemented long-term policy towards urban development is necessary if:—

(a) urban development is to act as a stimulus and complement to rural development;

(b) unacceptable urban social conditions are to be avoided;

(c) the cities are not to become an increasing drain on the country's financial and physical resources.

The objectives of urban policy may be defined in terms of:—

(a) Restraining the overall rate of urban population expansion;

(b) Distribution of that growth amongst the various urban centres, so as to avoid excessive congestion in one city and so as to disperse total urban population amongst a number of towns to maximize the development impact on rural areas;

(c) Maintenance of a general level of well-being in the towns consistent with the requirements of an equitable urban rural balance and satisfactory work performance by the urban community;

(d) Minimization of the capital and foreign exchange costs of pursuing the other objectives.

4. Restraint on the drift to the towns will be an important result of successful rural development, including the re-orientation of the educational system to meet the needs of rural life. However, it must be recognized that, even if the rate of movement is held down, urbanization is an inevitable phenomenon and, indeed, if it is undertaken in a controlled and healthy fashion, desirable. Cities provide markets for the produce of the countryside; also, as agriculture develops it will eventually mechanize, reducing the basic need for rural labour. Therefore, a high rate of urban growth must be prepared for.

5. The meeting of the needs of the growing urban population, at minimum cost, with desirable social results, involves a complex range of issues, only some of which have been considered so far in preparing this Plan. An important element is the creation of a realistic housing policy and programme. The problems involved in providing adequate urban water supplies present extremely difficult questions because of the heavy costs involved. Systematic work is also underway on the long-term policies and programmes required to meet urban transport requirements.

6. The growth in urban populations has persisted at a rate of 6 per cent per annum over the past two decades. In the period 1948–57 towns grew at 6·0 per cent per annum while in the 1957–67 period there was a slight increase in the growth rate to 6·3 per cent. Since 1957, the population of Dar es Salaam has grown at 7·8 per cent per annum, leading to an ever increasing concentration of population in Dar es Salaam. During the period 1965–67 the growth rate of Dar es Salaam population was as high as 11 per cent per annum.

7. If these rates of growth continue in the future, town populations would double every 12 years; if the 1957–67 Dar es Salaam growth rate continues the capital will double in size every 7 years.

8. This would mean that Dar es Salaam would have a population of over one million by 1985 and over 3 million by the year 2000. Although this may seem extraodinary, it is not dissimilar to the population explosion experienced in urban centres of a number of less development countries.

9. Dar es Salaam is the dominant "pole" for urban development, attracting population and investments for four main reasons:—

(a) It is the administrative and political capital.

(b) It is the largest port.

(c) It has become the industrial and commercial capital.

(d) The cumulative effect of past growth in response to (a) and (b) has given Dar es Salaam unrivalled facilities for urban living and commercial development, making it the obvious first choice of location for most urban projects.

10. The net result of these combined forces is that Dar es Salaam commands a lion's share of the recorded capital investment for the whole country.

11. Even though industrial development is fairly new in Tanzania—so that it cannot yet be claimed that any one location is permanently established as the industrial centre of the country—current trends would result in Dar es Salaam laying claim to that role.

12. Comparing population and employment statistics of the major urban areas for recent years, it is clear that the immigration into towns is closely related to the provision of job opportunities.

13. The high immigration into Dar es Salaam becomes clearly understandable when one realises that the number of jobs has risen by about 8·7 per cent annually (roughly at the same rate as the population increase). In recent years Dar es Salaam has been the major source of new jobs

14. If a large number of jobs can be created in towns other than Dar es Salaam, then these towns will be able to absorb a good part of the general trend towards urbanisation and the influx into Dar es Salaam may be controlled. There will be a deliberate policy of encouraging the creation of new jobs in a selected number of towns other than Dar es Salaam.

15. If the creation of a new jobs in these areas can be guided in a way to encourage urban growth in centres other than Dar es Salaam, wherever possible, then this would have a beneficial effect in creating new growth poles in the country.

16. A clear policy in regional location of new industrial projects is to be implemented to the effect that all new industries that do not necessarily have to be in Dar es Salaam for special reasons should be located in other towns. Since most new industries are to be started with government participation, such a policy can be effectively implemented through existing policy machinery.

17. Apart from slowing down the excessive growth of Dar es Salaam, the aim of such a policy will be to create poles of eventual self-sustained growth in other parts of the country. If new industries and job opportunities are scattered indiscriminately all over the country, effective alternatives to Dar es Salaam will not be created. Rather, emphasis will be on developing a limited number of towns that show growth potential and that are strategically located in terms of the geography of Tanzania. These towns will generate a self-sustained growth as an attractive economic location after an initial period of help and special programmes to set this process in motion.

18. Apart from the location of new industries, government will make a major contribution to the success of such a policy by decentralizing certain government functions.

19. The zones of population concentration are as follows:—

(a) Greater Dar es Salaam: the fastest growing population centre, receiving very heavy emphasis in existing investment programmes and as a result enjoying a large share of new job opportunities.

(b) Tanga and its hinterland: has enjoyed fast growth in the past as a result of sisal expansion—but has stagnated as a result of the sisal depression.

(c) Kilimanjaro and environs: an area of past intensive growth, with continued urban expansion both in Moshi and Arusha, with industrial, commercial and tourist development. Despite the problems of the coffee industry, the zone enjoys continuing growth.

(d) East Lake: the zone of fastest agricultural expansion during the past seven years, with resulting commercial and industrial expansion, particularly in Mwanza.

(e) West Lake: a zone of past growth but current stagnation; for commercial and industrial purposes the area is a somewhat poor location because of its remoteness from the rest of Tanzania. However, it might prove a suitable location for some activities serving an East African market, if there is further development in the communication system on the Lake.

(f) Kigoma: similar to parts of the South, with dense population but low levels of commercial development, generating low levels of both external and internal trade.

(g) Southern Highlands: repeatedly identified as a "high potential" area but with only a small part of this development yet realized—explanation often given as locational (i.e., transport).

(h) Southern Coast: parts of which have enjoyed some development in recent years with the expansion of the cashew industry, but which must still be recognized as a neglected area.

20. In addition, the centre of the country supports a substantial population which is, however, more widely spread than the zones of intensive settlement indentified above.

21. The zones may be be distinguished according to their past development as follows:—

Sustained and continuing development—Dar es Salaam, Kilimanjaro, East Lake;

Past development and current low growth—Tanga and West Lake;

Limited urban development ares—Kigoma, Southern Highlands, Southern Coast and central areas.

22. Concentration of growth in Dar es Salaam is partly the result of large-scale investment decisions, particulary by the Government. Growth in Kilimanjaro and East Lake has resulted from agricultural expansion which has, in turn, acted as a stimulus to other development. In all three cases, regional development may be seen as a cumulative process, once development is initiated at a high rate, additional investment opportunities are spontaneously developed.

23. In the neglected areas, the reverse process operates. Road building is not justified, because of the lack of potential traffic. Electricity schemes remain unimplemented because of an insufficient market. The farmer does not enjoy a local cash market for food production and, in turn, has little income to spend. The ambitious young man leaves the district, and surplus resources generated by taxation or profits are invested in other parts of the country.

24. In order to mobilize development in a region it is necessary to concentrate enough activities of sufficient size and wide enough range that the general tempo of economic activity accelerates sufficiently to justify the projects implemented and provides an environment in which a range of new investment opportunities are spontaneously developed.

25. On the other hand, it must be recognized that even those regions which are "more developed" are still, in an absolute sense, poor. They will not now be neglected. Moreover, in light of the overall scarcity of resources in the country, economic policy must remain constantly concerned to produce productive results; there is, therefore, a much more stringent limit the degree to which neglected zones can be assisted, as compared with regional development policy in a more developed country.

26. A vigorous policy of urban decentralization will result in a number of medium-sized urban centres, each providing facilities and economic stimulus to surrounding regions. That can be done if those alternative centres which are already showing signs of vigorous potential are given a further boost in the coming Plan, along with two or three other centres in neglected areas, while other centres are given concentrated attention in subsequent plans as the economy prospers.

27. Faced with a situation in which a certain minimum concentration of effort is required in order to break the vicious circle within a given neglected zone and, in view of the very limited resources available, effective regional development strategy must be phased—everything cannot be attempted in all parts of the country at once.

28. The phased programme will consist of the following: —

(a) In all problem and neglected zones, there will be crop priority programmes to ensure a basis for the long-term development of the zones.

(b) Resources from the Regional Development Fund will be available in all regions.

(c) Where necessary incentives will be used to encourage small-scale industries in the less developed regions (see Section on Small-Scale Industries).

(d) A number of urban areas outside Dar es Salaam will be chosen as possible poles for intensive development, for the implementation of concentrated and comprehensive development programmes during the Second Plan period.

(e) During the Second Plan period, planning work will be initiated for similar concentrated development programmes in other zones during subsequent periods.

29. The development of major centres requires systematic steps at the national level to establish sufficient momentum in the chosen locations.

(ii) *Selection of Urban Growth Areas.*

30. In the northern part of the country, Tanga, Arusha/Moshi and Mwanza are the obvious poles of economic activity. All three urban areas have shown in the recent past that they are developing by themselves as centres of the more advanced economic regions of the country. Tanga has grown slowly in recent years but has a sufficient economic base to be able to overcome present difficulties and attract new activities. There are a number of large projects which appear appropriate for Tanga. Moshi and Arusha have shown the highest growth of any places outside Dar es Salaam and they are likely to continue to do so without very much help from outside. Mwanza has not grown as fast as Arusha/Moshi in terms of population, but it is the centre of the fastest-growing agricultural areas in the country and recent industrial developments will create sizeable new job opportunities.

31. According to plans ready for implementation, almost all new industries that are to be set up outside Dar es Salaam are planned to be located in these three northern urban areas. These towns need only marginal special efforts and incentives to boost their growth. They appear sufficiently viable to attract new industries and activities, particularly if the setting-up of new industries in Dar es Salaam is actively discouraged.

32. There will eventually be a northern development corridor stretching from Tanga to Arusha/Moshi and the Lake Region around Mwanza.

33. The picture in the southern part of the country is far less satisfactory. Development in the southern highlands and southern coastal areas has lagged behind development in the northern part of the country for many years. The lack of urban development in the southern part of the country is a result of, but reinforces, the general lack of development in the area. Thus, although from the point of view of immediate impact, the development of centres in the north of the country will more readily provide alternative poles of development to Dar es Salaam, there are pressing reasons why serious attention should be given to urban development in the southern part of the country.

34. The planned development of urban centres in the southern part of the country may be seen as a part of the comprehensive effort being made to accelerate the southern regions. There are two obvious candidates for concentrated urban development in the south—Mbeya and Mtwara.

35. Mtwara is the obvious choice as a growth centre on the southern coast. It has shown very little natural growth in the past, both in terms of population and of industrial activities, but it is the centre of a fairly densely populated hinterland with good agricultural potential. Is has a splendid harbour with a vast excess capacity. The main disadvantage of Mtwara is its lack of communication facilities with the rest of the country.

36. The hinterland of Mbeya is of high potential in terms of population and of future agricultural expansion. If Mbeya grows into a sizeable town the surrounding countryside will readily adapt to provide food for it, which, in turn, will be a stimulus to it. Mbeya will be linked in the near future by tarmac road to Dar es Salaam and to Zambia. Mbeya will be the most important station in Tanzania on the Tanzam railway and will probably receive workshop facilities. Mbeya is unusually well endowed with cheap hydro-electricity potential. With the prospects of increasingly closer co-operation with Zambia, Mbeya will become important as a main centre port for this trade. Also Zambia provides a market for some of the products of Mbeya Region. Based on all these considerations Mbeya has been selected as the main urban growth centre in the Southern Highland area. Its natural growth impetus has been very limited in the recent past and it needs considerable direct help to boost up its activities.

37. The town has all the basis facilities to make it an attractive place, so that, after an initial impetus, a cumulative growth effect should be engineered.

38. All the towns so far discussed are on the periphery of the country. Over the long-term, the desire to integrate the country and to encourage internal trade make it desirable to develop urban centres in the middle of the country. However, the population in the centre of the country is spread thinly over large areas and there is a lack of concentration of growth in any particular location of the kind which might herald the development of a major urban centre. Morogoro has grown at a reasonable rate and has definite potential. Its location within easy reach of Dar es Salaam and on major transport routes is to its advantage; its immediate hinterland makes it easy to supply a fast growing town with food.

39. In addition, the evident choices are Tabora and Dodoma. Tabora is an important rail centre. As the extreme south-western and western parts of the country develop, Tabora will become a dynamic growth centre.

40. Dodoma is an obvious choice as a long-term centre for urban growth, because of its central geographical location. It has grown at about the average rate of urban growth in the past, now ranks as the seventh town in size, and is the centre of a district consisting of more than 300,000 inhabitants. The greatest advantage of Dodoma is the moderately good communication links it has with all parts of Tanzania, making it a useful commercial and administrative location. The relative scarcity of water in Dodoma requires that in choosing industries emphasis should be placed on the need to economize water.

41. During the next Plan, therefore, Mwanza, Arusha/Moshi, Tanga, Mtwara, Mbeya, Morogoro, Dodoma and Tabora have been chosen for concentrated urban development. The objective of policy will be to increase the share of urban development occuring in these centres.

TABLE I

TARGET GROWTH OF SELECTED TOWNS

Town	Population 1967	Assumed annual growth rate 1967–1970	Estimated population 1970	Target annual growth rate 1970–1974	Estimated population 1974
		%		%	
Dar es Salaam	272,500	9	353,000	7*	462,400
Tanga	60,900	5	70,000	10	102,500
Mwanza	34,900	6	41,500	9	58,500
Arusha	32,300	13	46,500	13	78,000
Moshi	27,000	7	33,000	10	47,500
Dodoma	23,600	6	28,000	9	39,500
Tabora	21,000	3	23,000	8	31,000
Mtwara	20,400	3	22,000	6	27,800
Mbeya	12,500	6	15,000	12	23,500
Morogoro	25,300	6	30,100	9	42,500

*By 1974 it is hoped that it will be possible to reduce growth below 6 per cent, but existing momentum is such that in the first years of the Plan it will be much higher.

TABLE IIA

EMPLOYMENT IN MAJOR URBAN AREAS 1964–1967

Type of Employment	Dar es Salaam		Tanga		Mwanza	
	1964	1967	1964	1967	1964	1967
Agriculture...	1,349	1,528	394	268	355	612
Manufacturing	9,469	15,231	1,437	1,941	952	897
Construction	5,151	6,577	1,486	1,282	1,767	1,880
Electricity and Water ...	1,051	2,266	412	539	72	264
Commerce	5,825	7,517	1,468	1,473	1,281	1,157
Transport and Communications	10,243	13,188	2,407	1,578	990	1,080
Services	12,329	18,868	2,670	2,777	1,564	2,140
Total ...	45,802	65,246	10,291	9,858	6,992	8,040

TABLE IIB

EMPLOYMENT IN VARIOUS SECTORS: 18 URBAN AREAS

Type	Total for Tanzania	18 Urban Areas
	1967	1967
Agriculture	123,887	6,882
Mining and Quarrying	6,493	361
Manufacturing	31,186	23,902
Construction	41,929	22,667
Electricity and Water	7,093	5,733
Commerce...	20,077	16,780
Transport and Communications	29,725	21,743
Services	86,351	40,631
Total ...	346,741	138,688

TABLE III

MAJOR NEW INDUSTRIAL PROJECTS SINCE 1961

In Dar es Salaam

Portland Cement Factory.
Friendship Textile Mill.
Tanita (Cashew Processing).
Tanzania Cashew Machines.
Tegry Plastics.
Tanzania Publishing House.
National Small Industries Corp.
Coastal Dairy Industries.
Tanganyika Enamelware Factory.
E.A. Motor Assemblies.
Mount Carmel Rubber Factory.
Tasini Textiles.
Louvent Manufacturing (Window frames).
Kibo Paper Industries (Carboard boxes).
Simba Plastics.
Ubungo Farm Implements Manufacturing.
Tabisco (Biscuits).
Tanzania Bakeries.
TIPER Oil Refinery.
Soxy Ltd. (Socks and Stockings).
Craven and Speeding (Sisal twines).
Tanganyika Sisal Spinning (Sisal twines).
Ekasa Garments Industries.
Garments Manufacturers Ltd.
Kamyn Industries.
Kanvir Industries.
Shati Ltd.
Tanganyika Garments Manufacturing.
Vono (Metal Furniture).
Kioo Ltd. (Glassware).
Cassman Brown & Co. (Metalware).
Aluminium Africa Ltd. (Corrugated sheets).
Dar es Salaam and District Transport Co. (Car assembly).
Mwananchi Tractor & Vehicle Assemblers.
Zambia–Tanzania Road Services Workshop.

In Tanga

Sikh Saw Mills.
Kilimanjaro Blankets.
Usambara Spinning (Sisal ropes).
Commercial Industrial Combine (Shirts).
Tanzania Investment Promoters (Soap).

In Mwanza

Mwanza Textiles.
Vegetable Oil.
Tanganyika Fishnet Factory.
Shah Garments.
Lake Soap Industries.

In Arusha

Tanganyika Meerschaum Corporation.
Northern Dairies Ltd.
Tanzania Litho.
"A" to "Z" Clothing (Garments).
Sun Flag (Garments).
Phillips Radio Assembly.
Kilimanjaro Textiles.
Tanzania Food Corporation (Biscuits).
Oswhal Industries (Plastic footwear).
E.A. Garment Factory.
Tanganyika Extract Co. (Pyrethrum extract).

In Moshi

Sisal Bag Corporation.
Kibo Match Corporation.
Moshi Clothing Factory (Garments).
Imara Plywood Ltd.
Kilimanjaro Sweets.
African Flower Industries (Fibre coils).

Elsewhere

Bukoba Tea Company.
Tanganyika Instant Coffee, Bukoba.
Tobacco Processing Co. Morogoro.
Vacu Lug Tyres, Iringa.
Diamond Cutting, Iringa.
Lime Products, Mtwara.
Coir Fibre Processing, Mtwara.
Mbeya Lime Company.
Kilombero Sugar Factory.
Ghee Co-operative, Musoma.
Magnesite Mines, Same.
Mkomani Mining.
Mtwara Cashew Company.
Tabora Msitu Products (Saw mill for sleepers).

B. *Urban Infrastructure*.

42. One of the serious problems arising from a high rate of urbanization is the heavy costs for the provision of urban infrastructure which must be met from the nation's limited resources. The concentration of population into the dense living conditions of the large city necessarily results in heavy costs. The development of roads and urban transport systems, the provision of water and sewage, the creation of service infrastructure for industry, the provision of health and other social amenities all demand great amounts of resources.

43. Some of these demands arise because the very nature of urban life requires a type of service which can be avoided or postponed in the rural areas—this is true of sewage systems and mass transport facilities. Other demands result from the fact that typically the urban community is in a position to assert the priority of its own requirements over those of the rural community; in most countries this results in the standard of urban services being higher than rural amenities even where this is not justified by any special conditions of urban living.

44. In developing countries it has therefore been typical for urban areas to gain at the expense of the countryside, and urban development to claim a large share of financial resources which might otherwise go to more directly productive investment.

45. It is typical, however, of many developing countries that even if the town lays claim to an undue share of available resources, this results in benefits for only a minority of urban dwellers. The situation which develops is that a minority aspire to achieve levels of living comparable to the standards enjoyed by the wealthier classes in the industrialized countries, while the majority live in wretched conditions. It is the government's intention to avoid such developments in Tanzania by ensuring that the benefits to be derived from the limited resources available for urban development be spread among all urban dwellers.

46. The most important means of achieving this objective will be through the implementation of the urban housing policy, which is set out in the Housing Chapter of the Plan. The principles applied there and also in relation to other urban services are:—

(1) to achieve certain minimum standards at a level which can be made available generally to urban dwellers;

(2) to maximize the self-help contribution of urban dwellers to the improvement of their own conditions; and

(3) to restrict severely the allocation of resources to luxury, high cost facilities.

47. The implication of the first principle is that first priority in the allocation of resources will go to provision of certain minimal facilities. In order that facilities can be extended to the fast growing population, the level of service provided will be trimmed to an austere level.

48. The Government will also be seeking new ways of supplying services on a community basis where resources will not be available to provide services on an individual family basis.

49. The implication of the second principle is that the use of public resources will be concentrated on those types of facilities, such as water supply, which are necessarily provided by the Government, leaving a wide area for the energies of community self-help to meet the need. Thus the housing programme provides for a major contribution of self-help to the creation of housing structures, services being laid on by Government. The principles of Ujamaa in the urban areas can

be applied both in mutual aid in the improvement of housing and in the creation of communal facilities such as access roads, community buildings and recreational facilities.

50. The third principle implies that the Government will apply a more austere policy than in the past to the provision of more expensive type of infrastructure. In the housing sector a strict upper limit will be applied to expenditure on houses financed by Government, parastatals, or public loans which has been set at Shs. 75,000. With regards to residential areas, the present zoning scheme is to be reviewed to ensure optimum use of land for residential purposes.

51. The total availability of public resources for urban infrastructure is to be kept below ten per cent of the total central government budget. This means that over the Plan a maximum of some Shs. 250 million is likely to be available. This sum will suffice only if major investments in such expensive items as road systems and new major sources of water are kept to a minimum. It implies, for example, that infrastructural development in the Dar es Salaam Master Plan will be phased over a much longer period than was envisaged at the time of formulation of the Master Plan.

52. A key aspect of urban infrastructure is the provision of water.

53. Compared to the other African countries, Tanzanian urban areas are relatively well served by water both in terms of the proportion of urban populations served and in terms of the types of outlet facilities provided. There are still, however, improvements to be made in that many urban dwellers experience considerable difficulty in satisfying their water needs. In addition, the quality of water in some urban areas is believed to pose health problems. A major agrument favouring investment in urban water supplies relates to the health of the population. If adequate quantities of clean water are made available, medical expenses can be avoided, the labour force strengthened and the general level of well-being greatly improved.

54. Industry and commerce also rely on water in their productive processes, although at present these users consume only a small proportion of the total amount of water supplied.

55. In recent years, emphasis has been placed on providing water to those users who can pay for this service. This policy has led to relative neglect of the provision of kiosks from which water is provided free. Consumption from private connections has been increasing rapidly whereas those relying on kiosks have experienced increasing difficulty in meeting their water requirements.

56. There is considerable per capita variance in the consumption of water in urban areas. Those using water from kiosks are estimated to consume about 5 gallons per person per day. On the other hand, those using water from private connections consume an average of 30 gallons per day up to 250–300 gallons per day, the over-all figure being closer to 30 gallons.

57. This situation has several undesirable consequences. In the first place it means that those consuming water from kiosks are not getting enough water to maintain health standards, while many of those with private connections are consuming much more than considerations of health and modest comfort require. In addition, the rising consumption from private connections presses on the capacity of water systems, requiring that investments be undertaken to expand the supply. As the development of new major water sources will in the case of Dar es Salaam cost tens of million of shillings the implications of urban water policy for the use of resources are of considerable consequence.

58. Therefore, it is the intention of the Government during the Second Five Year Plan to curtail excessive consumption from private connections by adjusting the water rate structure while at the same time giving more emphasis to kiosks in the water distribution system. Further study is being undertaken to devise means of enabling more urban dwellers to finance the installation of private connections.

59. The Government will also take measures during the Second Five Year Plan to improve the quality of water in areas where it is believed to pose health hazards.

CHAPTER XIII

HOUSING POLICY

A. *Policy Objectives.*

Achieving a successful housing programme involves undertaking a number of tasks:

(a) planning for the needs of a fast growing population;
(b) mobilizing savings for capital formation in housing;
(c) developing an efficient building materials and construction industry;
(d) ensuring proper land use;
(e) mobilizing self-help housing efforts;
(f) encouraging more desirable rural settlement, notably in Ujamaa Villages.

2. Urban housing is a particularly difficult area. In the rural areas, a simple dwelling made of local natural materials without plumbing, electricity or other related facilities may be bearable, but in the crowded conditions of the town the same standards create slums with serious public health hazards and socially demoralizing consequences.

3. The housing programme for the Second Plan, both in urban and rural areas, has been worked out keeping in view not only the needs for additional housing units to meet the increased demand, but also in light of the strictly limited availability of financial resources in the public sector.

4. In urban areas the problem is to build houses which meet family needs and are suited to urban conditions, and which can be supplied at a cost within the resources of the lower paid worker. This problem will be met by lowering costs. Minimum standards will be fixed separately for urban and rural areas to be within the financial reach of the majority of people. Further, the money devoted to housing will be more efficiently utilized in terms of serving greater numbers of people per shilling spent.

5. The rapid growth of urban population can claim huge investment in infrastructure. This may lead to conflict between different objectives. On the one hand, shelter must be provided for urban populations, while on the other, Government is committed to redressing the imbalance between urban and rural areas. A sound housing policy must, therefore, harmonize this apparent conflict. This will be done if as many town dwellers as possible look to themselves, singly or jointly in groups, to provide housing with only a minimum of necessary assistance from the state. This is the essence of self-reliance.

6. Improved housing provides both tangible current benefits and hope for a better future, which can provide motivation to the people to promote capital formation by contributing their labour and by mobilizing savings which otherwise would not flow into investment. Housing programmes, based on self-help and mutual aid, assisted by some outlay of cash from the public sector, will contribute to general development by imparting new skills and promoting savings and capital formation, while giving a personal meaning to economic progress.

7. The housing problem, by its very nature, cannot be solved in a period of five years. The long term goal is the eventual liquidation of the existing shortage and inadequacies while meeting the demand for housing that results from increase in population. The concrete programme for the Five Year Plan has been devised in a manner that aims at a progressive realization of this long term goal.

B. *Recent Experience.*

8. About one-fifth of estimated investment in residential buildings (which does not include self-help rural housing) during the First Plan was public sector investment. The National Housing Corporation, started in 1962, was given the responsibility in the First Plan of carrying out the bulk of public sector housing programmes. The Government contribution to the Corporation during 1964–65 to 1968–69 has been of the order of Shs. 69·4 million (see Table 1). An additional Shs. 19·4 million was raised by the National Housing Corporation overseas.

TABLE 1

CENTRAL GOVERNMENT EXPENDITURE ON HOUSING DURING THE FIRST PLAN

Million Shillings

Year	Government Expenditure on Staff Quarters	Contribution to N.H.C.	Total
1964–65 ...	—	10,000	10,000
1965–66 ...	802	9,200	10,000
1966–67 ...	354	15,620	15,974
1967–68 ...	9,344	17,700	27,044
1968–69 ...	2,129	16,850	18,979
Total ...	12,629	69,370	81,999

9. The main activities of the Corporation have been:

(a) construction of houses under the slum clearance scheme for rent and tenant-purchase;

(b) site development; and

(c) loans to urban local authorities for roof loans to individuals.

The total number of low cost and medium cost houses built by the Corporation during the First Plan period was 6,327 with the following breakdown:

TABLE 2

CONSTRUCTION BY N.H.C.

	Low Cost	Medium Cost	Total
Dar es Salaam	4,292	386	4,678
Other Townships	878	204	1,082
Ex-Townships	296	27	323
Rural Areas	239	5	234
Total ...	5,705	622	6,327

10. The main effort was in the urban areas, particularly in Dar es Salaam (an average of 936 units per year) where the housing shortage is very acute. As about 70 per cent of the houses built in Dar es Salaam were under the slum clearance

scheme, the net addition to housing stock by the Corporation was less than 400 per annum, which just touched the fringe of the housing problem. Nevertheless, the absolute achievement of the National Housing Corporation has been very considerable.

11. Central Government expenditure on housing during the First Plan was of the order of Shs. 12·6 million. After accepting the Adu Report in 1964 the Government divested itself of the responsibility of providing facilities to its employees except in the case of:

(a) technical assistance staff, including "designated" officers;

(b) institutional accommodation for those on "short call" or emergency duties;

(c) duty posts, e.g., medical officers attached to hospitals etc.; and

(d) those posted in isolated or remote areas where suitable accommodation for rent may not be available.

12. Expansion of housing for Government servants in the First Plan has occurred only in these categories. Local authorities and parastatals have continued to provide houses to their employees. Also, under existing labour laws employers must in most instances, cause their employees to be housed in houses of prescribed standards, and with prescribed sanitary arrangements.

13. A Revolving Loan Fund for house construction was available to Government employees. Up to 30th August, 1968 the total amount advanced from this fund was Shs. 16·3 million to 230 borrowers (the average loan being Shs. 70,608/-).

14. The Permanent Housing Finance Corporation (PHFC) is the only other organized source of housing finance in Tanzania. It was established in January, 1967. It gives loans up to 75 per cent of the cost of the house but it is willing to advance up to 95 per cent of the cost provided the borrower provides collateral or provided the employer of the borrower gives a guarantee. More than 50 per cent of the loans made are over Shs. 70,000 each; the loans advanced by P.H.F.C. now total more than Shs. 4 million.

C. *Second Plan Policies and Programme.*

15. The Ministry of Lands, Housing and Urban Development is responsible for the formulation and execution of housing policy.

16. Policy machinery is being created in the Ministry to co-ordinate the housing efforts of the National Housing Corporation, P.H.F.C., the community development organization, building co-operatives, etc.

17. For a proper follow-up of housing policy in all its aspects, the Ministry will ensure regular liaison with a number of other ministries and organizations such as Maendeleo, Devplan, Treasury, P.H.F.C., etc.

18. The provision of cheap housing in urban areas and the improvements to be effected in the traditional house and traditional building methods is partly a matter of research. At present research is being carried out in various Ministries and organization including Maendeleo and the National Housing Corporation. In future, this work will be co-ordinated by the Ministry of Lands, Housing and Urban Development.

19. At present the houses constructed under slum clearance schemes, as already stated, comprise about 70 per cent of the National Housing Corporation total with the result that there has been only a very small net increase in the housing stock. In future, a longer-term view of the slum clearance programme will be taken and the proportion of houses built under this scheme diminished. These houses will be within the reduced cost range.

20. In the Second Five Year Plan in view of the limited public resources and the need to mobilize labour and savings which would otherwise remain untapped, an ambitious programme of site and service facilities development will be launched. Under this system plots will be laid out and basic services provided, the actual house structure being left to the self-help efforts of the future residents. In view of the health hazard from the humidity, a permanent foundation will be provided in the coastal areas for as many of the sites as possible. This will give flexibility to the prospective occupants; the occupant will first build a "core" and could later add to it as his savings increase. In this way, many more people will be served than would be if the same resources were spent on houses.

21. The sites developed by the N.H.C. will be provided on a leasehold basis. Some organizational arrangements will be made for urban dwellers wishing to own houses on N.H.C. serviced plots. There will be a three pronged approach:

(a) Promotion of Building Co-operative Societies. TANU, NUTA and the Co-operative staff will spearhead the organization of such societies. For each project of 20–30 or more houses a separate society can be formed which opens its account in a bank. The members will be required to deposit their savings of an amount mutually agreed upon, every month until the time their down payment of 25 per cent of the estimated cost is deposited in full. Meanwhile, the society will negotiate a loan for the balance required. The actual construction is started only after the down payment of all members has been collected. The houses remain the property of the society till the time the entire loan has been paid off.

(b) Similarly, employers will be encouraged to form credit unions of their employees, with regular deduction of agreed savings made at the source.

(c) Building co-operatives, particularly those interested in taking up construction on a self-help basis and not through contractors, will receive technical guidance to be provided by the Ministry of Lands, Housing and Urban Development.

22. Finance for the housing needs of the top 10 per cent of the wage earners, i.e. above Shs. 500/- per month, will be left to P.H.F.C. The middle income group under this category, in view of high fees of architects in the country, will be supplied with approved standardized designs at low cost.

23. Another aspect of housing policy for this income range is that just as a minimum standard for urban areas has been proposed above, there is need for a concept of maximum standard, for making available institutional finance and for construction of houses in the public sector, whether by Government or by Parastatals, so as to prevent resources being diverted to the building of luxury houses. A maximum standard of Shs. 75,000 in the parts of the country with higher building costs with downward adjustment in the lower cost areas, will be enforced during the Second Plan.

24. It will be noted that the increase in the number of people in major urban areas during the years 1970–74 will be about a quarter of a million. In addition to housing such an increase the existing deficit and replacement needs must be met.

25. To meet the requirements of this additional urban population, in light of the limited resources available for urban infrastructural investment, a programme of public development of 35,000–40,000 houses and housing sites will be developed over the Plan concentrated in the ten cities identified in Chapter XII. This will be roughly one house or house site per seven additional people. In view of the

existing backlog this is a bare minimum, but even that total will pre-empt large amounts of scarce resources from productive sector and rural development projects and will involve much higher per capita expenditures on infrastructure for town dwellers than will be possible for the rural population.

26. At present N.H.C. is building over 1,000 houses per annum in the cost range of Shs. 7,700 to 35,000. In the future N.H.C. will confine itself to the building of houses in the range of Shs. 6,000 to Shs. 11,000. N.H.C. will increase its construction to about 2,000 houses per annum. The financial requirements will be of the order of Shs. 70 millions during the Second Plan. This will leave an additional requirement of about 20,000–25,000 houses.

27. This gap will be met by the provision of site-and-service facilities where prospective lease-holders can build houses through self-help or self-finance and by forming themselves into building co-operative societies. The N.H.C. and the Ministry of Lands, Housing and Urban Development will implement a programme of site development to the level of some 5,000 sites per year. These sites will be provided with water, drainage and foundations.

28. P.H.F.C. will finance the construction of 400 houses per year in the medium cost range. In addition, some contribution from the private sector in the medium and high cost range is to be expected in addition to the publicly financed projects. This may push the production of housing units in towns to above 40,000 for the Plan period.

29. This programme will provide the basis for a solution to the housing question: as experience is gained with site development and self-help building schemes they can be expanded to provide the basis for gradual expansion in the quantity and quality of housing available to urban families.

30. Currently operative building regulations are outdated. Architects when submitting their house plans for approval to the urban local authorities have to give a certificate that their plans are in conformity with existing outdated rules. These rules are not related to performance standards, as is now the case in a large number of countries, but specify out-dated forms of thickness of walls (minimum 9") etc. which research has proved to be unncessary. These rules will be amended during the Second Plan.

31. The import content in the lower cost National Housing Corporation houses is at present about 20–25 per cent whereas import content of medium cost houses is about 35 per cent. The main materials presently imported are:

(a) hardboard and asbestos pipes;
(b) ironmongery;
(c) plumbing materials; and
(d) electrical components.

It is possible to manufacture many of these materials within the country. The possibilities of import substitution are set out in the industrial programme. The target will be to have almost 100 per cent of the material for low cost housing manufactured in Tanzania by the end of the Second Plan.

32. In the rural areas, the major objective is to introduce improvements in the traditional house and in traditional building methods. Starting from a western-designed house and then proceeding to reduce its cost, as has been attempted sometimes in the past, cannot be expected to benefit the majority of the rural people because of the heavy costs involved. The new approach will be to start from the traditional house and modify that at a limited cost by methods which will be generally applicable.

33. By studying local building methods, materials and designs, many satisfactory solutions can be found which will improve existing levels of housing. Traditional designs will be more efficient, attractive and economic than artificially developed "model" houses based on standards in developed countries, often requiring use of foreign exchange resources and recourse to unfamiliar building methods. It will be better to find some of the better features of housing customarily built in this country and in nearby countries and build to these standards.

34. This will require first research and then communication of these techniques to the rural population. Dissemination of this information will be through the community development approach.

35. The community development organization of Maendeleo has, at present, 15 building teams at the regional level. These teams help the rural people to build schools on a self-help basis, but have not been responsible for any self-help housing projects. Such self-help building schemes have to be launched on a large scale to improve the quality of rural housing; the number of these teams will be increased so that by the end of the Second Plan each district has one team with supervision from the regional level field officer. At present the teams comprise a field officer assisted by two field assistants—a carpenter and a mason. While the field officers will be provided on the basis of one per region they will be assisted by more carpenters and masons to provide steadily increasing coverage of the rural areas.

36. The designs will be based on study of the availability of local materials and conditions. It will be easier to construct such houses, and later to expand them, if building materials and the size of rooms are based on a common unit of length. Also to be worked out in advance are:—

(a) specifications for building materials;

(b) quantities of each material required during construction process; and

(c) site plans.

These jobs will be undertaken at national headquarters by a department in Maendeleo. At present, at the national level there is only a field officer in charge of all the 15 building teams. As self-help building projects are to be initiated on a large scale, an experienced middle level officer will be placed in charge of the whole programme. While working under the Commissioner for Rural Development this officer will maintain a close liaison with the Ministry of Lands, Housing and Urban Development. These self-help housing schemes will be started in ujamaa and other larger villages.

CHAPTER XIV

ADMINISTRATIVE, SECURITY AND GENERAL SERVICES

The implementation of development programmes to a large extent depends on the quality of the administrative, security and other services. During the Second Five Year Plan, the extension and strengthening of these services will be undertaken.

A. *Administrative Services.*

2. More emphasis will be given to training of staff at the Institute of Public Administration and the proposed Institute of Development Management. The new cadre of Divisional Secretaries to the Districts will be developed. The posting of more qualified and experienced administrative staff to the Regions and Districts is an essential prerequisite to effective development. A modest programme of constructing or renovating Regional and District offices will be undertaken where necessary.

B. *Development of Statistics.*

3. The Central Statistical Bureau will be substantially expanded during the Plan period and it is intended by 1974 to have a fully Tanzanian staffed Bureau organized in functional sections and equipped with technical capacity to fulfil its tasks. The development of Statistics will provide the Government with more reliable data for future planning.

C. *Law and Order.*

4.—(i) *Justice:* During the Second Five Year Plan, the work already launchend of unifying the customary and statutory law will continue. This was started in 1961 with the intention of recording all the family laws, i.e. customary law regarding the payment and refund of bride price, marriages contracted under customary laws, divorce, the status of children, guardianship, wills and successions. The work was carried on under three zonal areas and steps are being taken to amalgamate all these zonal statements so as to produce one law which will apply throughout the country to all persons to whom it will relate.

(ii) *Judiciary*: In the Second Five Year Plan capital works envisaged include extensions to urban and district courts and the construction of new urban and district courts at places where they are urgently needed.

(iii) *Police:* The aim of the Division is to bring about a tighter enforcement of law and order and to improve security measures on the border. In order to achieve this objective, the Police Force will be increased numerically and strengthened with necessary equipment and facilities. This will include among other things, the expansion of the Field Force Units, the establishment of Stock Theft Prevention Units, especially in Mara, Shinyanga and Arusha Regions and strengthening of the Marine Units in the coastal areas.

(iv) *Immigration:* At present the responsibility for immigration duties is centralized at the headquarters. In order to make immigration services more effective and efficient, it is intended to delegate some of these responsibilities to zonal offices. In this case, particular attention will be given to areas which have to provide services to large numbers of immigrants and tourists.

A training programme at the Police Training School in Moshi for immigration officers will be started to provide officers for posting to the new regional offices.

Development funds for this Division will be used in the building of offices, staff quarters (where alternative accommodation facilities do not exist) and for the purchase of motor vehicles and equipment.

(v) *Prisons:* The present policy of the Prisons is aimed at helping the prisoners to become good citizens after finishing their prison terms. Accordingly, the Prisons Division will assist the prisoners in acquiring requisite skills in different crafts and trades.

Considerable expansion of farming activities, according to crop priorities worked out by Kilimo, is expected during the Plan and it will be necessary to engage farm managers in the bigger farms which cannot be managed by the prison staff. Most development funds will go into building of staff quarters and to provide agricultural inputs for the farming activities.

Prisons will also carry out a rehabilitation programme for habitual criminals by resettling them in villages where they will be encouraged to engage in productive activities.

D. *Defence and National Service.*

5.—(i) *National Service:* During the First Five Year Plan, it was planned to pass out 3,200 youths through the National Service. With the passing of the National Service Amendment Act, 1966, the subsequent expansion in the services has meant that over 8,000 youths passed through the service by the end of the First Five Year Plan. It is envisaged that during the Second Five Year Plan period—excluding leadership courses, seminars, etc.—about 58,000 youths will pass out through the Service.

With the opening of more training centres and Regional National Service Centres, the need for a capital programme for building and equipment has become apparent. It will be necessary during the Second Five-Year Development Plan to recruit over 2,000 youths at any one time. For this purpose, it is planned to open four more Training Schools at Tabora, Bukoba, Shinyanga and Mwanza. Special emphasis will be given on the establishment of productive enterprises, e.g. farms, workshops, etc., in conformity with national production priorities.

(ii) *Defence:* In matters of defence the policy of the Government during the Second Plan period will be two-fold. The first objective will be to fill the wide gaps in manpower, equipment and housing requirements which have persisted during the First Plan. The second objective will be the expansion of the defence programme consistent with the national requirements.

E. *External Affairs.*

6. The Ministry's general policy for development during the Second Five Year Plan will broadly be on similar lines as has been the case in the First Plan. It is intended to establish one new Mission in each year of the Plan.

F. *Other Services.*

7.—(i) *Information and Broadcasting:* The Information Services and Radio are the main instruments of national education. They are the main instruments for mobilising the masses for development. As the Five Year Plan is geared to the principles of rural development and self-reliance, it follows that much of its successful implementation will depend on the people's own efforts. The role of the Information Services and of Radio Tanzania in translating Government development policies into action programmes cannot be over-emphasized. It is, therefore, planned to expand the present capacity of all mass communication media so as to be able to fulfil this important educational function effectively. During the Plan period it is intended to expand the radio transmission capacity through the establishment of setellite stations in selected areas to provide effective radio coverage throughout the country. During the Plan the Ministry will establish an agency to sell Government publications in Tanzania and overseas.

(ii) *Welfare and Probation:* These services will be extended in the country during the Plan period by increasing destitute children's homes, rehabilitation centres and training centres for the blind, etc.

CHAPTER XV

AGGREGATE OUTPUT AND EMPLOYMENT TARGETS

Target Growth in Gross Domestic Product.

In recent years the economy has been growing at about 5 per cent per annum. Although this is a better performance than that of many economies, it is far from satisfactory. With population growing at about 2·7 per cent per annum, it will take over 30 years for *per capita* incomes to double. With *per capita* national income of about 460/- such rates of growth are not acceptable. In addition to the pressing need for rising consumption standards, the need to generate employment, to service fast-growing urban areas and to finance rapid expansion in educational, health and other social services all require a higher growth rate.

2. The set of productive sector programmes set out in the Plan are aimed to achieve an acceleration in growth. The plans to expand services and raise the level of capital formation will only be sustainable over the longer term if that output growth is achieved.

3. The overall output target the Plan aims to achieve is an average growth of 6·5 per cent per annum in real terms (i.e. after allowing for price changes). This states an aspiration similar to that of the First Plan; even at this rate, per capita income will take some twenty years to double.

4. The aspiration to accelerate the pace of development has been translated in the Plan into programmes of actions to achieve that acceleration. Experience suggests that it will be no easy task to raise the growth rate from around 5·0 per cent to about 6·5 per cent, but examination of sectoral prospects indicates that it is possible.

5. To sustain such a growth rate it will be necessary to raise the proportion of total output devoted to capital formation above the ratio achieved in the First Plan. The considerable expansion already achieved, however, provides a more solid starting point than that of the First Plan and therefore the rate of growth of investment required is less than that achieved in the First Plan.

6. The major part of economic activity derives from the rural sector. Achievement of the overall target requires a significant increase in the growth of this sector: growth in marketed agricultural output of over 7 per cent per annum is the target rate compared to the 6 per cent growth achieved in the past. Similar acceleration, from 10 per cent to 13 per cent growth rate per annum, is expected for manufacturing output. The detailed implications are set out below.

7. The target growth rates are projected from a base year estimate of trend performance in financial year 1968/69, the last year of the First Plan. (Actual performance may well deviate from this; however, for trend projections short-term vagaries are not important.) These projections, set out in tables 1–3 are in physical output terms and do not allow for losses resulting from possible decline in export prices.

8. In formulating overall projections, the outlook and possibilities for all sectors must be defined quantitatively however imprecise is the information available. Necessarily, because of the limitations of basic data, some parts of the projections are rough estimates of probable outcomes, rather than being representative of physical targets. This is particularly the case for the service sectors. This should be kept in mind in examining these figures. Moreover, the Tanzanian economy is inevitably subject to short-term fluctuations, generated by such uncontrollable factors as climate and world market prices. Judgment during the Plan about prospects for achieving the trend target must therefore be termpered by an assessment of transitory factors which may obscure the underlying trend.

B. *Sectoral Targets.*

I. *Directly productive activities.*

(a) *Agriculture.*

9. Estimates of agricultural growth are crucial for the determination of overall growth performance: —

(i) Agricultural output accounts for more than half of gross domestic product;

(ii) The product of a number of service sectors, such as transport and commerce, is partly determined by the level of agricultural output;

(iii) Agricultural output is the direct source of income for the bulk of the population.

10. However, agriculture is also an inherently difficult sector to plan or forecast. Not only is agriculture subject to unpredictable climatic and biological influence, but it is also organized through the energies of a vast number of small producers. In the past, small-holders have provided a major part of the impetus for growth, but the nature of this growth is often not easy to predict.

11. Targets for growth in the marketed product of crop husbandry are set by an analysis of the prospects for the eleven major crops in light of the crop priority policy and programmes set out in Chapter III. The relative importance of the crops is measured by their contribution to the total in the two most recent seasons for which data is available (in most cases 1967 and 1968). The sectoral target for growth in marketed product of crop husbandry is 7·3 per cent per annum. This total is built up as follows: —

(i) *Sisal production* is expected to decline slightly over the Plan period. The decline in world markets may well lead to a decline in exports as great as one-fifth; this may be partly offset by the utilization of sisal in the sisal pulp factory, leading to a net decline of some 10 per cent in output over the Plan, or 2 per cent per annum. The planting programme of T.S.C. is planned according to this target.

(ii) *Cotton* is expected to resume its growth after two poor seasons. The trend target, for an average year, for the end of the Plan is 615,000 bales; this compares with production performance in the peak 1966 season when weather was favourable, of 435,000 bales. Actual performance in the last year of the First Plan (1968) was below that figure due to the unfavourable weather. 400,000 bales has been taken as a base for projection yielding a rate of growth of 9 per cent per annum. (*Note:* In this case a distinction is made between a trend target used for G.D.P. projection and the physical target for a good climatic year set out in Chapter III. Cotton output is notoriously susceptible to climatic uncertainty).

(iii) *Coffee* expansion must be restrained because of market limitations. It is hoped, however, that it will be possible to market a growth of 6 per cent per annum through expansion of both quota and non-quota markets, leading to an output of 1,200,000 bags by the end of the Plan. This represents a sharp decline from past growth rates.

(iv) *Cashewnuts* are expected to continue to expand at a high rate; projection in this case is difficult, because of lack of detailed information. Output growth is projected at 10 per cent per annum, slightly below the growth rate achieved in the period 1960/62–67.

(v) *Sugar* production is to be expanded to meet the growth in local demand. This will require expansion of 6–7 per cent per annum. For this purpose the projection is set at 7 per cent per annum. A major contribution to this growth will come from the parastatal investment programme.

(vi) *Tea* expansion is to come mainly through the intensive expansion of small-holder schemes. The growth target of 9 per cent per annum does not fully represent the emphasis given to this programme; due to the lag between planting and the maturity of the plant, full returns from the projected programme will not be reaped until the next Plan.

(vii) *Tobacco* production targets of 25 per cent per annum growth for flue-cured tobacco reflect the ambitious programme of expansion. Targets for fire-cured are much lower because of market limitations.

(viii) *Pyrethrum* targets are set low because of the poor prospects for expansion in world markets. The growth target of 4 per cent represents a dramatic decline from past growth.

(ix) *Wheat* production will need to expand at 16 per cent per annum to meet Tanzania's objective of self-sufficiency in major foods. The achievement of this target is dependant on the state farm ivestment programme.

(x) *Rice* production will also expand at a high rate. Targets for purchases of paddy are set at a growth of 10 per cent per annum. State farms will also be important here.

TABLE 1
MAJOR CASH CROPS

	Target Growth Rate per cent Per annum	Growth Rate 1960/62–67 per cent per annum	Relative* Importance 1968/69 per cent	Relative Importance 1963/74 per cent
Sisal	—2·0	+0·9	16·9	10·5
Cotton	9·0	12·6	25·3	26·7
Coffee	6·0	12·1	19·7	18·1
Cashewnuts	10·0	11·7	7·5	8·3
Sugar	7·0	14·0	8·2	7·8
Tea	9·0	9·3	4·6	4·9
Tobacco (Flue cured)	25·0	{23·2}	4·2	8·8
(Fire cured)	6·0		0·7	0·6
Pyrethrum	4·0	25·4	2·3	1·9
Wheat	16·0	16·1	3·0	4·3
Rice	10·0	N.A.	3·7	4·1
Groundnuts and oil seeds	7·0	N.A.	3·9	3·8
Total ...	7·8	—	100	100

*The relative importance in 1968/69 is estimated on the basis of recent trends in farmers incomes derived from these crops particularly on data for the 1966–68 season.

(xi) *Groundnuts, oil nuts and seeds* have relatively good market prospects. Therefore, it is hoped that growth can be accelerated. A growth target of 7 per cent per annum is therefore set.

(xii) Other minor export crops and marketed food crops are expected to grow at more than 5 per cent; with the increased emphasis on food production, the growth of urban markets and the expansion in internal trade growth may well be much higher, but for projection purposes the cautious figure of 5 per cent per annum has been adopted.

12. In the *livestock* industry, the objective is to improve significantly on the poor performance of recent years. Growth in marketed production of 5 per cent per annum is the minimum which would be considered satisfactory. With the expanding domestic market, partially satisfied by imports (particularly of dairy products) and export possibilities, the pace of expansion will be set by the success with which supplies can be increased.

13. The increase in *forestry* production will depend upon the expansion in timber using industries; on the expectation of a number of timber utilization projects being implemented in the industrial sector, tentative targets are set at 8 per cent per annum.

14. With the considerable domestic market potential, the *fishing* industry could expand at a high rate. An ambitious target of 9 per cent per annum is set which could be achieved through an acceleration of growth as a result of an expanded fisheries department programme.

15. The achievement of growth at the rate of 7·2 per cent per annum in marketed agricultural output over an extended period of time is an extremely ambitious goal; if achieved it would excel the growth performance of most agricultural industries both in the developed and the poorer nations. However, it should be noted that the growth of 6·1 per cent over the period 1960/62–67

TABLE 2

GROWTH IN AGRICULTURE, FORESTRY AND FISHERIES

	1968/69 Relative Weights per cent	Growth Rate per cent per annum
Crops:		
Subsistence	40·7	3·0
Market	38·5	7·3
Liverstock:		
Subsistence	11·9	3·0
Market	4·7	5·0
Forestry:		
Subsistence	1·1	3·0
Market	0·7	8·0
Fishing:		
Subsistence	0·3	3·0
Market	2·1	9·0
Total ...	100·0	5·0
Total Subsistence ...	54·0	3·0
Total Market ...	46·0	7·2

was achieved despite a growth in sisal output of only 0·9 per cent per annum. Sisal accounted for almost one-third of total marketed agricultural output in 1960/62. The relative importance of sisal in the Tanzanian economy is now much smaller than at the outset of the First Plan; in the future the problems of the sisal industry should therefore be less of a drag on agricultural expansion.

16. Knowledge of subsistence production (output consumed without involving a recorded market transaction) is limited. The coming agricultural census should increase understanding of this sector considerably. It is desirable that growth should lead to increasing consumption levels in the countryside. It is intended that increased attention to food crops by the agricultural service and training in nutrition by the health and education services should lead to increased quantity and quality of food consumption. Therefore, despite the increasing monetization of the economy and the growth in internal trade it is to be hoped that subsistence consumption per capita can increase. The projected growth in subsistence production is therefore set at 3 per cent per annum, slightly above the expected growth in population, although it is unlikely than annual statistical data will provide any check on the success in achieving this goal.

(b) *Mining*

17. Output in *mining* will decline by as much as 2·5 per cent per annum as a result of declines in diamond and gold production, which can be offset only in part by a vigorous expansion in other mineral products.

(c) *Industry*

18. Being still highly underdeveloped, industry is capable of achieving a higher rate of growth than any other sector. During the period 1960/62–67 value added in manufacturing expanded at a rate of 10 per cent per annum. With an expanded programme during the Second Plan, the objective is to raise this rate of expansion to 13 per cent per annum.

19. The achievement of this target during the five years of the Plan will be facilitated by the considerable expansion of output to be expected from industries established in the First Plan. This is notably the case for textiles, where two large projects implemented towards the end of the First Plan will only reach full capacity operation during the Second Plan period.

20. The industry estimate is bult up as follows:

(a) Textile production is assumed to be double over the Plan. Such growth certainly implies stretching the market to a limit.

(b) Wood manufacture and non-metallic mineral production can grow at a high rate in light of the expected high rates of growth of construction activity and the proposed projects in the wood products branch; substantial expansion in cement capacity is planned.

(c) Output of rubber products will grow at a high rate from a low base as a result of the tyre factory which will go into production in the Second Plan period, increasing the branch five-fold from a small base.

(d) Chemicals and chemical products will expand at a high rate as a result of the implementation of the proposed fertilizer production programme; output of chemicals and chemical products can be expected at least to double.

(c) There are a very large number of projects in the food and beverages branch; this starts out as a substantial branch, accounting for more than one fifth of industrial output and can be expected to grow at slightly below the average rate of industrial growth—as the branch is a conglomeration of small and medium sized projects, the precise output effects are difficult to predict.

(d) *Construction.*

21. Construction will be another fast growing sector. The industry must expand to incorporate a growth in investment activity of the order of 10 per cent per annum, while the special factor of Tanzam railway construction will provide an additional boost. Growth in construction activity can therefore be expected to be at least at 10 per cent per annum during the Second Plan period.

II. *Services and Public Utilities.*

22. This sector grows by and large in response to the needs of other sectors.

(a) *Public Utilities.*

23. This is mainly electricity supply, which services the fastest growing sectors, and therefore grows faster than overall G.D.P. In light of power expansion plans of TANESCO and the expanded investment programmes of E.A.P. & T. growth of 12 per cent per annum is expected.

(b) *Commerce.*

24. This activity has tended to grow at a slightly higher rate than overall marketed product. The projected growth rate of 8·0 per cent is likely to reflect an increasing proportion of internal and East African trade.

(c) *Rents.*

25. Housing policy set out in this Plan implies a slightly higher rate of growth in housing than has been achieved in the past. Housing in use is expected to grow at some 6 per cent per annum.

(d) *Transport.*

26. With the growth of internal trade and traffic with neighbouring countries, the expansion in the *transport* industry is expected to continue at a somewhat high rate than growth in monetary economic activity. Growth is projected at 9·0 per cent per annum.

(e) *Services.*

27. The contribution of *services* to gross domestic product is largely measured by employment in that sector. One benefit of the income policy should be the achievement of a high rate of growth in this sector—for example, a given expansion in government recurrent spending may be expected to generate a greater expansion in public services than was possible in the 1960–62/67 period. Also, the emphasis on primary education and rural health expansion in the public sector will generate higher growth rates than in the past. Growth in this sector is therefore projected at 5·0 per cent annually compared with the estimate of past performance of 2 per cent over the period 1960–62/67 (which almost certainly under-estimates past growth in availability of services).

C. *Sectoral Balance.*

28. The desired pattern of growth is, in absolute terms, heavily dependant on the growth in marketed agricultural output (responsible for over one quarter of total output expansion) and manufacturing (responsible for one-seventh). The contribution of the construction industry will account for 7·5 per cent of total growth. Expansion in commerce is absolutely important (accounting for about one-sixth of the planned output increase) but is itself dependent upon growth in other sectors.

29. In turn, within the agricultural industry the most important contributions, in absolute terms, to growth in marketed output are, in order of absolute importance, cotton, tobacco, coffee, cashew, wheat, sugar, tea and paddy. Growth in cotton alone accounts for over one-quarter of the total increase in marketed output expected of agriculture, forestry and fisheries. Tobacco accounts for almost one-sixth of the total expected increase.

30. Although industry is planned to grow at a much higher rate than agriculture the base from which it starts is so low that the sectoral balance will not shift markedly over the Plan period. Even at a growth rate of 13 per cent per annum, manufacturing will only account for 8·4 per cent of G.D.P. by the end of the Plan (even allowing for possible under-counting of base year G.D.P., it would be less than 10 per cent).

31. Therefore, although longer-term growth prospects depend on the successful creation of an industrial base, performance during the Plan period will depend heavily on the expansion output of agricultural output, the expansion of which has been one of the main emphases of the Plan.

TABLE 3

OUTPUT TARGETS: GROSS DOMESTIC PRODUCT AT CONSTANT 1968/69 PRICES

Shillings, Million.

	1968/69	1973/74	Change 1968/69–1973/74	Per Cent Contribution of Sectors to Total Growth
Agriculture:				
Monetary	1,480	2,095	615	27·0
Subsistence	1,630	1,890	260	11·4
Mining	125	110	—15	—0·7
Manufacturing	384	707	323	14·2
Construction	278	448	170	7·5
Public Utilities	62	109	47	2·1
Commerce	830	1,220	390	17·1
Rent	347	464	117	5·1
Transport	316	486	170	7·5
Services	718	916	198	8·7
Total	6,170	8,445	2,275	100
Monetary	4.540	6,555	2,015	88·6
Subsistence	1,630	1,890	260	11·4

TABLE 4
TARGET GROWTH RATES FOR G.D.P.

	Relative Importance 1968/69 per cent	Target Growth Rate per cent per annum	Relative Importance 1973/74 per cent
Agriculture:			
Monetary	24·0	7·2	24·8
Subsistence	26·4	3·0	22·4
Mining	2·0	—2·5	1·3
Manufacturing	6·2	13·0	8·4
Construction	4·5	10·0	5·3
Public Utilities	1·0	12·0	1·3
Commerce	13·5	8·0	15·4
Rent	5·6	6·0	5·5
Transport	5·1	9·0	5·8
Services	11·6	5·0	10·8
Total ...	100	6·5	100
Monetary	73·6	7·6	77·6
Subsistence	26·4	3·0	22·4

APPENDIX 1: STATISTICAL NOTE

1. Base year (1968/69) G.D.P. is estimated by projection from the latest available estimates at time of prepatation, those for 1967, plus fragementary evidence on 1968 performance.

2. The relative importance of sub-sectors in manufacturing industry is based on the results of the 1965 survey of industry as adjusted in light of known major investments 1965–68.

3. In the gross domestic product estimates the total output of manufacturing is currently undervalued. The under-estimate is of the order of 15 per cent. Further, the definition of manufacturing activity is somewhat arbitrary, including cotton ginning, grain milling and cashew processing, but excluding sisal decortication, tea processing and sugar refining. Work is underway to produce a revised G.D.P. series. Meanwhile, the existing series is used, although the percentage growth target for industry is constructed on the basis of relative weights reflecting the actual industrial structure. The relative under-estimation of industrial output tends to lend a downward bias to the overall growth performance, as manufacturing is very much a leading sector. However, to prevent confusion it is best to base projections on the existing, published G.D.P. series.

D. *Manpower Needs and Employment Targets.*

(a) *Total Manpower Requirements, all skill levels.*

32. Based on the G.D.P. targets, it is estimated that non-agricultural employment will increase from 250,000 in 1968/69 to 348,000 in 1973/74. Based on Tanzania's experience since 1962 no increases above current levels (109,700) are anticipated for agricultural wage employment (it has steadily declined from 203,800 in 1962 to 109,700 as of July, 1968).

33. This represents a growth in non-agricultural employment of roughly seven per cent per annum, which is in line with long-term trends in urban population growth. The expected increase of 98,000 jobs, although large, is attainable, in light of the 54,000 increase in non-agricultural employment achieved between 1965 and 68.

(b) *Requirements for High and Middle Level Manpower.*

34. Tanzania is committed to self-sufficiency at all skill levels by 1980. It is this segment of the labour force which requires the greatest per capital investment by Government to produce. For each Five-Year Plan, therefore, a

survey is made to determine the requirements for this kind of manpower. This in turn serves as a guide to Government investment in secondary, technical and university facilities. The requirements set forth below are derived from the *Survey of the High and Middle Manpower Requirements and Resources for the Second Five Year Development Plan*, completed in March, 1969.

(c) *Category C Jobs.*

35. These are posts which require a secondary school education for direct entry to the job, special skills being acquired on the job after entry. These include all skilled clerical and office posts and the highly skilled modern crafts (involving precision metal working, electricity and electrical equipment). It is estimated that Category C requirements will be approximately 13,100 over the five Plan years.

TABLE 5

ESTIMATED NON-AGRICULTURAL EMPLOYMENT INCREASES—SECOND PLAN TO 1973/74—BASED ON G.D.P. TARGETS

	1968/69 Base Year	1973—1974		
Industry	Estimated Employment 1968/69 '000	Annual rate of G.D.P. increase per cent	Estimated Employment 1973/74 '000	Estimated Annual Increase in Productivity Per Cent
Mining/quarrying	6	2·5	6	2·5
Manufacturing	36	13·0	57	3·0
Construction	49	10·0	71	2·0
Utilities	10	12·0	18	—
Commerce	25	8·0	37	—
Transport Communication ...	32	9·0	42	3·0
Services	92	5·0	117	—
Total ...	250		348	—

Per cent increase in non-agricultural employment—7 per cent per annum.

Foot Notes to Table:

1. The Industrial Activities of Government (e.g. Construction etc.) are included in the appropriate sectors above.
2. The 1973/74 employment projections for the various industrial sectors (except Government and Services) have been estimated by application of estimated annual increases in productivity. These were derived from Tanzania's experience in the first four years of the First Five Year Plan. G.D.P. for Service industries is primarily based on employment and is not, as in the other sectors, an evaluation of physical outputs or services rendered. Therefore, a given growth in G.D.P. implies the same rate of growth in employment.
3. 1968/69 employment is estimated from Central Statistical Bureau's Annual Enumeration of Employment trends over the past several years including preliminary estimates for 1968.
4. In the case of mining one large project may involve substantial employment towards the end of the Plan period, although it will not generate output until the Third Plan. The net employment effects of changes in mining are not yet evident; for the moment it is assumed that employment in mining remains unchanged.

(d) *Category B Jobs.*

36. These are posts which require from 1 to 3 years formal training after completion of secondary school, Form 4 (Grade A Teachers, agricultural extension workers, engineering technicians etc.).

37. It is estimated that Category B requirements will be approximately 12,330 over the five plan years.

(e) *Category A Jobs.*

38. There are posts which normally require a university degree. It is estimated that Category A requirements will be about 3,850 during the five plan years (of which 55 per cent arts science/maths based occupations, 45 per cent arts).

(f) *Total.*

39. High and middle level manpower requirements will run about 29,300.

E. *Incomes Policy.*

40. An incomes policy is an essential element in national planning. The Second Plan aims not only to increase total output but also to share the benefits from that output equitably between various groups in society. In a socialist society efforts must be continuously directed to the closing of the gap between the rich and the poor. Further, workers in one sector should not enjoy disproportionate benefits, in return for a given effort, compared with those in another sector. This means that great care will have to be exercised in the negotiation of productivity agreements, for some sectors are inherently more capable of improvements in productivity than others. Workers in these sectors will, under a system of bargained wages based on productivity, be better off than workers in employment in areas where the potential for productivity increases in less evident.

41. In order to ensure that the Incomes Policy does in fact result in increased equality in distribution of income it must be complemented by an operational Prices Policy. Initially the following lines of action will be pursued.

(a) enforcing requirements that fixed prices be posted on all items;

(b) setting more minimum prices for a limited number of basic goods;

(c) publicizing both the controlled prices and typical fixed prices in leading stores, to try to increase consumer knowledge of proper prices.

These steps should allow a reasonable degree of control over wage earner living costs, greatly reduce price discrimination between different purchasers, and give consumers a clear idea of which stores are asking unusually high prices.

The development of price control policy is primarily the responsibility of the Ministry of Commerce and Industries. The existing Price Control Advisory Committee and its links with Regional Administration will be developed and greater liaison with the Party and the Ministry of Information and Tourism introduced.

42. In the opening years of the First Plan tendencies emerged in relation to the pattern of income distribution which, if left unchecked, would have led to most unfortunate social results. There was a rapid rise in urban wages, admittedly from an abysmally low level, which was unmatched by a similar increase in incomes in rural areas.

43. The Turner Report outlined the economic effects of the rapid rise in wages and labour costs experienced in the years since Independence. The most important was a substantial fall in the numbers employed in the secondary and tertiary sectors of the economy. Secondly, there was a diversion of workers' expediture from domestic goods and products to imported goods caused by a sharing of the same real purchasing power among a smaller number of employees. Thirdly, the rapid wage increase led firms to economize on labour with the result that in some instances a diversion to capital intensive means of production has occurred and unemployment has increased.

44. To some extent, the initial decline in employment after independence was due to a deliberate choice by Government to start from a small employed labour force, earning an adequate minimum wage rather than a larger exploited labour force. Having improved the remuneration of the urban labour force, it is now Government's intention to ensure that the growth of employment takes priority over further wage increases for those already employed. This will provide new opportunities for young Tanzanians and expanding markets for agricultural produce.

45. This policy and the need in the Second Plan period for a further slight increase in the ratio of savings to the Gross Domestic Product emphasizes the importance of the National Wages and Incomes Policy. Such a Policy economizes capital expenditure while at the same time ensuring that employees are equitably rewarded for their efforts.

46. The Permanent Labour Tribunal has been set up to implement this policy, with terms of reference as set out in White Paper No. 4 of 1967.

47. The Permanent Labour Tribunal has since been operating under these terms of reference.

48. On the question of Minimum Wages Government has agreed that the basis of the minimum wage should be determined by a realistic comparison of the actual living standards and efforts of the peasant farmer and his family to the effort and living standards of a rural wage earner. For those employed in urban areas an allowance will be made for the extra costs of town living.

49. In general, the incomes and prices policies are concerned with ensuring that money incomes expand in a manner that conforms to national economic and social objectives.

50. If the output targets are achieved and in the absence of severe negative shifts in the external trade position it will be possible to achieve growth in personal consumption of marketed output of between 6 and 7 per cent per annum. This means that personal consumption, including rural subsistence consumption, could rise between 5 and 6 per cent per annum. After allowing for population increase, this leaves the prospect of increases in per capita disposable income of between 2 and 3 per cent annum.

51. Although modest, the achievement of this growth would represent a substantial improvement on previous performance.

52. The intention of the Plan is that the major sources of income growth in the Second Plan should be as far as proves practicable:

(a) increase in the number employed (rather than increase in *per capita* income in the employed sector);

(b) increase in *per capita* income in the rural areas.

53. An increase in employment of 7 per cent per annum is bound to lead to an increase in the wage bill at a higher rate. However, there will be two countervailing influences which will keep the growth of the real wage in modest proportions:

(a) With a high rate of growth of employment a high proportion of employees will be young entrants to the work force, and will therefore be in the lower wage and salary range;

(b) Some part of the increase in wage rates allowed for under the incomes policy will compensate for the increases which can be expected in the price level; even with a cautious domestic monetary policy and the implementation of the Government's Price Control the upward trend in world prices will have some inflationary effect on the domestic price level.

CHAPTER XVI

CAPITAL FORMATION AND FINANCING THE PLAN

A. *Past performance and long-term objectives.*

1. At the outset of the First Plan the ratio of gross investment to gross domestic product was very low; in 1963 and 1964 the share of gross investment in gross domestic product was 14·5 per cent and 15 per cent respectively. It was evident that such low rates of capital formation could not sustain a satisfactory growth performance. Therefore, one of the central objectives of the First Plan was to raise the proportion of total available resources devoted to investment activities. One of the most important achievements of the First Plan has been to achieve that objective; by 1967 gross investment accounted for 22·9 per cent of gross domestic product.

2. Over the long-term it will be necessary to achieve an even higher allocation of resources to capital formation if desired rates of growth are to be achieved. However, it must be recognized that as the ratio of investment to total output rises it becomes more difficult to increase investment or to restrict

TABLE I

GROSS FIXED CAPITAL FORMATION

By Type of Asset

(At Current Market Prices)

(in millions of Shillings)

Asset	1960—62	1963	1964	1965	1966	1967*	Annual Growth Rate 1960/62 – 67 (%)
Building:							
Residential	80	68	101	122	95	115	+ 6·3
Non-residential	88	100	105	132	144	151	+ 9·4
TOTAL ...	168	168	206	254	239	266	+ 8·0
Construction:							
Water supplies	23	20	30	43	26	30	+ 4·5
Communications†	32	29	26	38	62	95	+19·9
Railways and Harbours ...	42	24	24	15	17	25	+ 8·3
Other	44	65	69	100	85	120	+18·2
TOTAL ...	141	138	149	196	190	270	+11·4
Equipment:							
Transport	62	59	89	107	176	250	+26·2
Machinery	123	120	127	208	250	284	+15·0
TOTAL ...	185	179	216	215	426	534	+19·3
GRAND TOTAL .	495	485	571	765	855	1,070	+13·1
As a % of monetary G.D.P. at marketed fixes	18·0	14·5	15·0	19·4	19·5	22·9	

Source—Central Statistical Bureau. *Provisional. †Excluding Railways current spending further. Starting from low levels of income, it is essential that the benefits of development are used in part to provide immediate increases in consumption and social services, and in part to increase the wealth of the country for the benefit of future generations. Therefore, a careful balance must be struck at the margin between the need for continuing mobilization of investment, with the attendant austerity which that involves, and the need to provide improving conditions to the current generation.

3. Over the long-term it would be desirable to invest 27–28 per cent of monetary gross domestic product at market prices. Because of inevitable fluctuations, this would imply in some years raising the ratio as high as 30 per cent (on the basis of comparative experience a very high rate indeed). The achievement of such a *gross* ratio would make 20–21 per cent of gross domestic product available for a *net* increase in capacity which would be sufficient to permit a very high growth rate in output.

4. The achievement of such a rate of capital formation requires a steady expansion of the *savings* potential of the economy which cannot be achieved and maintained by short-term fiscal expedients. However, the increasing size and effectiveness of the publicly owned sector, including the parastatal financial institutions, should create a growing pool of investment resources.

5. For the Second Plan, the objective is to consolidate and build upon the capital formation achievement of the First Plan with a continuing increase in the ratio of capital formation to gross domestic product, but without the same accelaration as achieved during the past four years. In numerical terms the objective will be to raise the ratio of capital formation to gross domestic product to the region of 25 per cent by the end of the Second Plan allowing the achievement of the long-term objective defined above during the Third Plan period.

B. *Second Plan Capital Formation Targets.*

6. The capital formation objective is to achieve a *10 per cent rate of growth* in investment over the Plan (See Table 2) so that the economy will be capable of allocating 25 per cent of total product to capital formation by the outset of the Third Plan. These targets will be affected by the special circumstances of the very large Tanzam railroad investment which, if included, would boost the figure to levels which would be misleading as a guide to long-term possibilities. Therefore the investment target *of Shs. 8,085 million* includes only that portion of Tan-Zam railway expenditures which it is expected will use local resources during the Second Plan period.

7. The phasing of investment targets it set out Table 2. The growth implied for the first year of the Plan is 10 per cent; at the time of Plan formulation 1968/69 outcome is not known, so that the achievement of first year targets may require a greater increase.

8. The overall investment target represents ambitious yet perfectly feasible goals. In practice, of course, year to year phasing is unlikely to follow such a smooth pattern.

The achievement of the investment target will require:

(a) A Government development budget of Shs. 3,055 million involving a 10 per cent annual increase;

TABLE 2

PHASING OF INVESTMENT

Shillings Million

Year	Central(1) Government	Parastatals(2) and Co-ops	Private	East African(3) Community	Total
1969/70	530	300	370	100	1,300
1970/71	575	380	400	120	1,475
1971/72	630	460	430	120	1,640
1972/73	650	540	460	120	1,770
1973/74	670	620	490	120	1,900
TOTAL ...	3,055	2,300	2,150	580	8,085
Annual Growth: 1968/69—73/74	10%	20%	7%	See (3) below	10%

(1)Not including contribution to parastatals; including an estimated Shs. 305 million contribution to local costs of TanZam Railway.

(2)Including contribution from central government.

(3)Phasing of East African Community estimates represents a rough judgment ragarding likely implementation of plans. However errors in this total do not greatly effect the other elements in the table as East African projects are mainly externally or self-financed. 1972/73 and 1973/74 may well be higher as a result of subsequent plans.

(b) Parastatal and co-operative investment programme of Shs. 2,300 million expanding at 20% per annum;

(c) A private sector investment forecast to grow at much lower rates than public sector investment. The Plan suggests a 7% rate of growth, resulting in a drop in the relative importance of private investment over the plan.

(d) A considerable investment programme by the East African Community and East African corporations of Shs. 580 million.

9. The Central Government development budget target represents an ambitious goal; nevertheless it represents a lower rate of expansion than was achieved in the First Plan, which started from a much lower base. Whereas in the First Plan implementation capacity was often the crucial constraint, in the Second Plan more often the bottleneck will be available resources. Ministries are likely to have more projects available than there are resources to implement them. Projects and programmes under consideration indicate that these figures represent stringent limits in almost all sectors in comparison to the development projects Ministries consider they can implement.

10. The heavy impact of two major communications projects, the Dar es Salaam—Tunduma Road, and the Kilimanjaro Airport, account for a high proportion of the increase in development spending in the first two years of the Plan. As investment of these projects tails off in the third year, very fast growth of development spending on other activities will be required to sustain the momentum of development spending.

11. Table 3 represents the balance of the programme as between sectors and Ministries. This table reflects the policies and programmes outlined in the various chapters of the Plan.

12. The definition of aggregate investment targets for the parastatals presented many more difficulties than in the case of the government development spending targets. In relation to the Government budget a considerable amount of experience has been accumulated, and the Second Plan aims to continue expansion from this solid base. In relation to the parastatals, Government has much less experience. Many of the institutions involved are new. Further, during the Second Plan, special emphasis is being placed on a fast rate of expansion in productive capacity through the agency of the parastatal organizations. In preparing the Plan, therefore, many of those uncertainties about implementation capacity and appropriate targets which in the First Plan applied to the government ministries in the Second Plan apply to the parastatal sector. However, despite these inherent difficulties, targets have been set which specify the magnitude of the task to be undertaken by the Parastatal sector.

13. In the past, those businesses now included in the parastatal sector have implemented annual investment programmes of the order of Shs. 150–250 million per annum. In the future, much higher rates of investment must be achieved if the publicly owned sector is to play the leading role expected of it.

14. Table 4 indicates the parastatal breakdown, which gives an indication of how the overall investment targets will be achieved. In practice, the detailed project composition of the various organization's programmes will be adjusted during the Plan. The industrial programme, for example, includes a number of project possibilities which it is expected will be implemented but which have yet to be costed in detail for inclusion. By and large, however, the addition of new projects is likely to be combined with the dropping, postponement or reduction of projects already in the programme, as the ministries and parastatals proceed with further critical evaluation of programmes. The improved control and implementation structure which has been created for the parastatals will make an increasingly refined examination of the effectiveness of the parastatal programmes possible.

TABLE 3

CENTRAL GOVERNMENT DEVELOPMENT EXPENDITURE

	Shs.
Kilimo	635,544,750
Landsurvey	309,654,500
Maendeleo	180,379,495
Comworks	922,359,271
Education	297,136,300
Health	98,824,590
Mincom	32,147,240
Maelezo	16,750,000
Devplan	13,300,000
Foreign	11,300,000
Central Establishments	30,000,000
President's Office	189,000
Second Vice-President's Office	392,000
Judiciary	1,070,000
National Service	25,000,190
Defence	104,952,664
Home	71,000,000
Total	2,750,000,000

15. During the Second Plan investment in the private sector (see Table 5) will be of diminishing relative importance. The importance of private investment lies in a relatively narrow range of activities:—

(a) Over one third of private investment will come in residential construction (including owner occupied housing) and other building.

(b) About one third of private investment will be in the form of transport equipment for the road transport industry.

(c) Large-scale construction contractors, importing equipment for the expanding construction industry, will account for more than 10 per cent of total private investment.

(d) Miscellaneous manufacturing and agricultural equipment will therefore account for relatively minor element in private investment (between 10 and 15 per cent).

Thus, private sector investment remains dominant in housing and other real estate, road transport and the construction industry, but is no longer crucial to the basic industrial and agricultural investment programmes of the country.

C. *Sources of Finance:*

16. The basic objective will be to maintain the pattern of self-reliant finance established during the First Plan. This involves the utilization of such external finance as is available under suitable terms and conditions, while ensuring that the implementation of the development programme does not become excessively dependent on external sources. This means that the major share of development resources is to continue to be raised locally.

TABLE 4

PARASTATAL INVESTMENT 1969/70—1973/74

Parastatal	Total Investment Shs. thousand	Government Contribution
TANESCO	456,900	174,000
N.D.C.	781,000	240,000
N.S.I.C.	6,500	
N.A.F.C.O.	112,300	
T.T.C.	203,000	
S.T.C.	20,000	100
T.S.C.	92,500	20,000
L.S.M.B.	12,000	—
N.A.P.B.	25,000	—
Tobacco Board	7,100	—
Tea Authority	88,500	10,000
Dairy Board	9,000	—
N.M.C.	10,100	—
N.H.C.	278,000	110,000
National Parks	29,600	21,000
Computor Corp.	4,000	4,000
N.I.C.	15,000	—
N.B.C.	26,000	—
Bank of Tanzania	4,500	—
N.C.B.	1,300	—
N.D.C.A.	1,600	1,600
Co-operatives and Workers Development Corporation	100,000	—
Others	4,000	4,000
Total	2,287,900	584,700
N.D.C.A. (net lending)	143,000	65,000
N.S.I.C. (net lending)	3,600	—
	2,434,500	649,700

NOTE:—This table includes net medium and long-term lending by N.D.C.A. and N.S.I.C. which is not direct investment activity by the parastatal sector. For the overall targets, the total investment target for the parastatal sector has been rounded to Shs. 2,300,000.

TABLE 5

PRIVATE SECTOR INVESTMENT (Million Shs.)

Housing	600
Other Building	275
Transport	750
Construction Equipment	250
Other Machinery	275
Total ...	2,150

17. The Central Government Development Budget will require Shs. 3,705 million during the Second Plan; this includes an estimated local cost of the rail link of Shs. 305 million of which Shs. 200 million will be generated by drawing down commodity credits. Central Government contribution to the parastatals of Shs. 650 million is also included in this total.

18. Of the Shs. 3,400 million for purposes other than the Tanzam railroad it is estimated that Shs. 1,400 million can be raised from external sources. If account is taken of the expected recurrent spending of Government over the Plan, this means that external sources will account for some 12 per cent of total Government spending.

19. Table 6 indicates possible local sources of finance. This table implies:—

(a) Continuing restraint of recurrent spending.

(b) Active use of parastatal financial institutions as a source of public development finance.

(c) The maintenance of a cautious policy of monetary expansion with only modest use of residual finance.

20. The parastatal programme can also expect to receive external finance; TANESCO, for example can expect to receive substantial long-term finance for its expansion programme. Other parastatals can expect to receive equity contributions in joint projects and also to have access to medium and short-term loans. However, the use of very short-term loans and supplier credits will be minimized, for even if they make a noticable contribution to gross financial resources available the net contribution over a five year period would be much less because of heavy repayment flows. It is expected that between 35 and 40 per cent of the parastatal programme will be financed externally, in gross terms.

21. The internal contributions of the parastatals in this period cannot be expected to be the major source of finance; many of the organizations will be responsible for compensation payments through the Plan period, while, in general, the organizations are not yet built up into a strong enough financial condition to generate sufficient internal savings. In this Plan period, therefore, the parastatals are expected to provide about 30 per cent of their finance from their own resources, while about the same proportion will derive from the Central Government.

TABLE 6

CENTRAL GOVERNMENT

SOURCES AND USE OF RESOURCES (Million Shs.)

Sources		Uses	
1. External (including 200 commodity credits)	1,600	1. Central Government Programme	3,055
2. Transfer from Recurrent Budget	620	2. Parastatals	650
3. Security Sales (including Provident Funds, Insurance, N.B.C., etc.)	1,335		
4. Other Local ...	150		
Total	3,705	Total ...	3,705

D. *Balance of Payments.*

22. The availability of foreign exchange to finance required imports is a possible constraint on development. As most machinery and equipment is imported, a quickening in the pace of investment is immediately translated into an increase in the import of capital goods. Similarly rises in personal incomes resuling from development result in growth in the demand for imported consumer goods. Scarcity of foreign exchange could, therefore, require restraint both on the rate of capital formation and the overall level of economic activity. The feasibility of the Plan must therefore be checked in terms of the balance of payments situation, and any potential gaps must be met by adjustments in programmes and policies.

23. Balance of Payments projections, based upon the Plan programmes and targets, are out in Table 7. These projections indicate, under certain assumptions spelt out below, that if the output and capital targets are achieved, the external financial situation will remain in balance, with a margin of safety.

24. The first element in the payments projections is the trade balance. This is expected to deteriorate during the Plan, as the imports of intermediate goods (expected to grow at 13 per cent per annum) of transport equipment (growing at 9 per cent per annum) and capital goods (growing at 10 per cent per annum) create a sharp rise in the import bill. This will be kept in reasonable bounds, however, by tight restraint on consumer goods imports, which are intended to be kept at Shs. 750 million per annum throughout the Plan. This will be achieved by a sharp rise in domestic production of consumer goods, both industrial products and foodstuffs. This growth in import substitution should result in the required restraint in consumer goods imports without additional policy measures, but if necessary policies will be implemented to ensure the required result. The net result is that imports are expected to grow at more than 7 per cent per annum.

25. On the export side, growth will not match the import expansion. Diamond exports are expected to decline. Although physical growth of agricultural exports of between 7 and 8 per cent per annum is planned, some of this will be lost as a result of declining world prices. Overseas exports, other than diamonds, have been projected to grow at 5½ per cent per annum. However, exports to partner states in the East African Community are expected to grow (from a very low base) at 15 per cent per annum. As a result, total exports are expected to grow at about 5½ per cent per annum.

26. The situation on the invisibles account will also deteriorate, although not drastically. A steady increase in overseas debt payments on the negative side will partly be compensated for by a growth in investment incomes, tourist receipts and other invisible items.

27. However, the negative balance on recurrent account will be compensated for by the net inflow on capital account, based on the assumed gross inflows for the Central Government and parastatal programmes, as outlined in the previous section of this chapter, and East African Community external financing. The result is an expected net inflow on capital account rising from Shs. 273 million in the first year of the Plan to Shs. 401 million in the last year, in line with the rate of growth in investment during the Plan.

28. The payments projections also allow for an accummulation of reserves of some Shs. 254 million which will be required in light of expanding imports. However, in the event of international monetary reform economy will be possible on this item.

29. The overall result of these calculations is that while in the first years of the Plan there will be considerable leeway in the foreign exchange situation, for the final three years the situation will be roughly in balance and will require careful management to ensure that unforeseen developments do not create a gap.

TABLE 7

BALANCE OF PAYMENTS PROJECTIONS

	A. TRADE IMPORTS (Million Shs.)					Annual growth rate per cent 1969/70–1973/74
	1969/70	1970/71	1971/72	1972/73	1973/74	
Consumer	750	750	750	750	750	0
Intermediate	452	511	577	652	737	13
Transport Equipment	218	238	259	282	308	9
Capital Goods	577	652	730	790	845	10
TOTAL IMPORTS	1,997	2,151	2,316	2,474	2,640	
	EXPORTS					
Domestic Exports	1,812	1,897	1,987	2,083	2,185	5
Re-exports	55	61	67	74	81	10
Community	115	132	152	175	201	15
TOTAL EXPORTS	1,982	2,090	2,206	2,332	2,467	
Adjustments	—63	—66	—69	—72	—76	
TRADE BALANCE	—78	—127	—179	—214	—249	
	B. INVISIBLES					
Payments	369	405	450	499	550	
Receipts	332	351	385	419	458	
BALANCE INVISIBLES	—47	—54	—65	—80	—92	
	NET INFLOW ON CAPITAL ACCOUNT					
TOTAL	273	279	308	363	406	
Required Increase in Reserves	40	45	50	56	63	
BALANCE	108	53	14	13	2	

E. *Recurrent Spending.*

30. Recurrent ceilings for Central Government spending have been set which:—

(a) seek to hold down the overall growth in recurrent spending to a sufficiently low level to allow a substantial transfer of resources to the development budget;

(b) allow for a high rate of growth of recurrent spending for certain Ministries whose programmes have an important social or development impact, while restraining the growth of other spending;

(c) reflect growth in recurrent expenditure implied by the Ministerial development programmes.

The ceilings proposed are intended to be in constant price terms. In comparing with past trends and with detailed expectations any changes in the general price level must be taken into consideration. Thus if there is continuing upward drift in the price level it may be expected that both government revenues and expenditures will grow somewhat faster than is suggested by these figures.

31. The resultant rate of growth over the Plan is 7·5 per cent per annum. A heavy emphasis on expansion of agricultural services and of education and health facilities is allowed for, while the growth in general administrative services is kept to a minimum.

F. *Policy Implications:*

32. Although the Second Plan aggregate targets do not demand the same rate of *acceleration* of investment as was attempted and achieved in the First Plan, it should be recognized that, starting from much higher levels, it will require considerable effort to achieve the further increases desired. Further, whereas in the First Plan there were in the early years implementation bottlenecks other than the purely financial constraint, it is now evident that projects exist in excess of likely financial resources and that failure to achieve the resource mobilization targets proposed would frustrate the achievement of viable projects, which would otherwise go ahead.

33. Within the public sector, the heavy demands in the communications sector, resulting from the development of the Tan-Zam transport system, means that if a satisfactory expansion programme for other sectors is to be achieved the aggregate figures set out here represent a realistic and necessary target—not an "ambitious projection". The achievement of such an investment level will require:—

(i) continued vigorous mobilization through the budget, both through a tax policy which ensures that revenues grow slightly faster than monetary incomes, and restraint on the growth of non-developmental spending;

(ii) an increased channelling of savings to the public and parastatal sector through the various public financial institutions.

34. The dramatic increase in the role of the parastatal sector indicates that the finance of that sector will loom increasingly large as a factor in the total resource picture. The needs of the parastatal sector will require mobilization of resources by Central Government and also claim substantial resources from the public financial institutions. The external financing of this sector will play an increasingly important role in the Balance of Payments. Moreover, the parastatals will themselve become an increasingly important source of financial resources, both through the accumulated resources of the financial institutions and through the retained profits of all the organizations.

35. If this programme is to be implemented in a fashion which reflects government priorities and which is consistent with Balance of Payments and domestic financial equilibrium more systematic central control will have to be exercised than has previously been attempted. For this purpose, detailed programming of the whole parastatal sector is being included in this Plan for the first time. During the Plan period, it will be necessary to include increasing annual co-ordination of the parastatal sector.

36. The Plan programme is consistent with a sound Balance of Payments situation. However, restraint may be required in the import of consumer goods during the Plan, and careful management will be needed of additional external debt obligations of a short-term nature.

TABLE 8

RECURRENT SPENDING: GROWTH CEILINGS

MINISTRY/DEPARTMENT	Annual Rate of Growth 1969/70–1973/74
	%
Consolidated Fund Services	8
President's Office and the Cabinet Secretariat	4
First Vice-President's Office	3
Central Establishments	3
Regional Administration and Rural Development	8
Foreign Affairs	5
Permanent Commission of Enquiry	3
Judicial, Police and Civil Service Commissions, and Local Government Service Commission	3
Office of the Second Vice-President	4
Defence and National Service	6
Judiciary	5
Justice	3
National Assembly	3
Agriculture, Food and Co-operatives	9
Economic Affairs and Development Planning	8
Exchequer and Audit Department	3
National Education	9
Commerce and Industries	5
Communications, Transport and Labour	10
Lands, Housing and Urban Development	7
Treasury	6
Home Affairs	3
Health and Social Welfare	8
Information and Tourism	3
	7½%

NOTE:—These growth rates apply to a 1969/70 base. Because of Ministerial re-organization, transfer of responsibilities from District Councils to Central Government and changes in accounting methods comparison between 1968/69 and 1969/70 is not straightforward. The 1969/70 Recurrent Estimates will be published soon after Plan publication.

CHAPTER XVII

IMPLEMENTATION

A. *General Principles.*

1. The Plan documents set out the broad objectives the nation is attempting to achieve and details projects, programmes and policies which are necessary to achieve those objectives. The translation of projects, programmes and policies into reality is a challenging task, not only for the Central Government, but for a wide range of institutions and individuals who can help the effective implementation of the Plan. The only real meaning of the Plan lies in that implementation.

2. The Plan sets goals which are deliberately ambitious. It does not accept the availability of resources—of human effort and of capital—as given but sets targets for mobilization well above previous achievements. The first task of the Plan is to achieve an increased mobilization of effort.

3. The mobilization of development effort in the Second Plan differs from that in the First. Throughout the First Plan there was a heavy emphasis on the expansion of Central Government development spending as a focal point of the overall mobilization effort. As a result of that effort, government investment capacity and the government savings effort were expanded, so that the Second Plan starts at a very much higher level of development activity than the First Plan; very high rates of growth of government development spending will not be required in the Second Plan, although great effort will be required to build upon the base already created.

4. By contrast, the parastatal sector is faced with a massive task of mobilizing investment capacity—it is intended that total investment by parastatals by the end of the Plan will be at least twice as high as in the first year; even first year targets imply a sizeable acceleration in investment activity over previous levels. The central implementation objective, therefore, is to ensure a very high rate of growth in investment by parastatals over the Plan.

5. The second characteristic of the mobilization effort is the intention to mobilize the energies of the people of Tanzania at the local level both in efforts to expand economic activity and social facilities and in creative initiatives to fashion new co-operative forms of social and economic organization. The mobilization effort must therefore engage the support of the people and make the means available for the available enthusiasm to be used creatively through the country.

6. A high degree of mobilization for development is the first task of the Plan. Mobilization by itself, however, is not enough. The energies expended and the investments made must be used effectively to achieve economic and social goals. Thus while the first test of Plan success is the achievement of the investment targets, the more fundamental test is whether the investments made generate the desired results in amounts which justify the efforts made. The cost effectiveness of the development effort is the second crucial aspect of implementation. As a first step it is important to quicken the pace of development activity, almost irrespective of the effectiveness of the results, but when the desired investment levels have been achieved and there is a high tempo of development activities, it becomes increasingly important to check the efficiency of those activities, otherwise the sacrifices being made will be in vain. An increasingly important theme during the Second Plan will, therefore be checks on the efficiency of investment decisions and the practical impact of development programmes.

7. Although a Plan sets out specific targets for a defined, five year time period, it is also a report on work in progress, a description at one point in time of a process which is essentially continuous. The Plan includes a number of projects in final preparation ready for implementation immediately. It includes others which, even if the timing is still a matter to be decided, will certainly be implemented at some future date—this is true of some large infrastructural projects, the implementation of which is obviously desirable but the timing of which will depend on the availability of resources. Many projects, on the other hand, are at a preliminary stage, still to be tested by further study. Moreover, the steady expansion in planning capacity which is intended, is likely to generate project possibilities yet unthought of. Therefore, although it is appropriate to set firm objectives, and ascertain the feasibility of their achievement by fashioning the best possible programme, it would be a mistake to suppose that the programme should not be modified in light of the fruits of additional efforts and the availability of new information. It is not intended to change the overall objectives during the Plan period, but it is intended that there should be an evolving view of the means whereby the basic goals will be reached. A process of annual re-assessment is therefore to be set in motion, which can review the Plan each year in light of experience of Plan implementation and to set short-term tasks to be attempted in the coming year.

8. Not only does the passage of time bring modifications as a result of additional study and experience, but also the economy is strongly affected by imponderables, such as vagaries of climate and unstable world markets, fluctuations which can have a strong impact on performance and possibilities. Even if the projects in the Plan were all fully proven and the discovery of new possibilities extremely unlikely, the impact of such unpredictable phenomena would make systematic short-term adjustment of the Plan imperative.

B. *Annual Plans.*

9. To achieve regular review and re-assessment of the Five Year Plan, the Government intends to produce an Annual Implementation Plan. As planning capacity is expanded, the Annual Plan will be produced as the automatic by-product of the systematic work of the implementating organizations and the co-ordinating economic ministries. The development of the Annual Implementation Plan will be phased over the period 1969–74, so that by the end of the Second Plan it will be a fully developed part of Plan procedure.

10. The annual implementation plans will aim to put into effect the tasks included in the Five Year Plan, adjusting to evolving conditions and in light of implementation experience.

11. The annual plan will include an analysis of the economic situation and a comprehensive presentation of policies. During the First Plan, implementation performance tended to be judged very much in terms of government budgetary performance. This was appropriate, in that one central task of the Plan was the expansion of governmental development spending. However, during the Plan period the tendency was to broaden the concept: for example, the comprehensive evaluation of such policy tools as agricultural prices has become a regular part of governmental procedure. During the Second Plan the comprehensiveness of the planning implementation coverage will be steadily extended.

12. Steps will be taken over the five years to create machinery which can ensure the consistency of parastatal plans with national objectives, give more concrete indications to the private sector of the role it is expected to play, bring East African corporation plans into line with the requirements of national policy,

and maintain a proper balance between the growth of recurrent and development spending. With foreign exchange and skilled manpower likely to be constraints on development, control over the use of foreign exchange resources and efficient allocation of available skilled manpower are also vital to successful implementation.

13. The preparation of a fully comprehensive annual document to cover all these matters at this stage of planning development is at best an ambitious objective. If the initial attempt were too ambitious, there would be a real danger of the diversion of energies into a continuous round of paper work. Far more information would be required to formulate theoretically perfect annual plans than is now available. The government therefore intends to move towards the ultimate objective in a series of carefully phased steps. The two initial priorities are to create a more effective plan implementation framework in relation to the parastatal sector, and to take steps to expand the basic planning capacity of the executive ministries. These will be priority tasks of the first year of the Plan, and are discussed at greater length below.

14. Much of the work of control and implementation is the day to day business of government; the annual plan is therefore in part a stock-taking of a series of initiatives taken throughout the year, but reviwed in a more comprehensive framework than is always possible in the daily conduct of business. As such, it is intended that the published Annual Plan document shall be a practical document, providing an accounting to the nation of economic performance and prospects. Initially it will be built up from the information which is currently available and is utilized in preparation of *Background to the Budget*. The first step will be to add to the analysis already included in the Background to the Budget on overall review of intentions and expected performance for the coming year, emphasizing both the government and parastatal programmes and policies. In addition, there will be detailed presentation of strategic new policy initiatives and analysis of critical bottlenecks.

15. In detail the preparation of Annual Plans, when fully established, will include:

(a) an analysis of the state of the economy, reviewing sector-wise national income growth, capital formation, expenditure patterns, balance of payments, production, prices, employment, wages, skilled manpower availability and finance and banking.

(b) an evaluation of plan implementation, comparison of planned targets and actual performance and reasons for deviations, including a review of investment expenditure to identify bottlenecks, capacity and manpower problems, foreign aid utilization etc. and problems faced in efficient use of existing assets and services.

(c) a review of policies including agricultural price policy, extension policy, credit policy, resource mobilization policy, export promotion and import substitution policy, debt policy, taxation policy, manpower recruitment policy, and incomes and wages policy etc.

The above analysis will:

(a) make possible an evaluation of the relative performance of different sectors of the economy assessing new opportunities, bottlenecks and problems faced by the private, parastatal and public sectors in undertaking development;

(b) provide a basis for making alterations in plan targets, strategy, programmes, project priorities and policies ;

(c) make possible a more accurate estimate of resources available to the Government; and

(d) suggest measures necessary for following years' implementation.

C. *Ministerial responsibilities.*

16. Throughout the First Plan, continuous efforts have been made to expand the implementation capacity of the government ministries. Effective implementation capacity is partly a question of the effectiveness of general administration, partly professional performance in relation to the specialized technical requirements of the sector in which the ministry operates (e.g. the availability of agriculturalists, or civil engineers, etc.) and partly the creation of formal planning capacity.

17. Government ministries have performed successfully over the First Plan, in that they have succeeded in implementing fast expanding programmes. However, the ever-increasing demands on the ministries through the Second Plan will require a continuous expansion in routine administrative capacity. The first task is therefore to maintain and improve the quality of the administrative service through training, effective discipline and leadership.

The provision of adequate professional staff is, over the long-term, dependant upon the output of the education programmes, which have been geared to produce the specialist needs required. In the short-run it is more a question of recruitment and efficient utilization of existing staffs. This problem was discussed in the manpower chapter, where the intended means of tackling the problem were set out.

18. To facilitate the professional work of the ministries and the effective implementation of sectoral strategies during the Second Plan, the ministries have been re-organized to ensure a more effective division of labour. Responsibility of the technical side of agriculture (including irrigation and water development), agricultural marketing and processing has been consolidated in the Ministry of Agriculture, Food and Co-operatives. Responsibility for regional and local government, mobilization of rural self-help efforts and the development of ujamaa activities has been consolidated in the Ministry of Regional Administration and Rural Development. All educational activities, including adult education, have been placed with the Ministry of National Education. Responsibility for town planning, housing, and the development of urban infrastructure (including water), has been placed with the new Ministry of Lands, Housing and Urban Development. These changes along with the parastatal rationalization set out in the next section, will concentrate responsibility for implementation for a given sector within one Ministry, at the same time as placing the available expertize there.

19. In addition to the traditional responsibilities of ministries, the development of economic planning and the shift to a socalist economy have led to a whole new set of demands on the ministries, especially those directly responsible for economic and social affairs. A listing of these responsibilities is formidable:

(a) preparation of ministerial programmes—including efficient use of existing assets and services, leading to recurrent budget estimates.

(b) detailed preparation of projects and new services, determination of priorities, leading to development budget estimates, and preparation of projects for submission for external assistance.

(c) an evaluation of implementation experience in programmes and projects and review of sectoral strategy; assessment and reformulation.

(d) an assessment of manpower requirements and preparation of a recruitment plan consistent with proposed programmes and projects.

(e) integration of parastatal programmes with sectoral strategy, leading to production and investment targets and policies for parastatals (commercial viability of projects to be studied by parastatals and presented to ministries in the form of two year forward budget).

(f) investigation of private sector intentions and liaison with the private sector.

(g) liaison with East African Corporations.

20. In addition to sectoral strategy (in terms of programmes, projects, targets, etc.), certain ministries are responsible for evaluation and re-formulation of particular over-all policies. For example, substantive work on agricultural price policy is the responsibility of the Ministry of Agriculture, Food and Co-operatives evaluation and re-formulation of incomes and wages policy is that of the Ministry of Communications, Transport and Labour; and export promotion, industrial and internal marketing that of the Ministry of Commerce and Industries.

21. To provide planning capacity to undertake this considerable range of tasks, it is intended to set up planning units in all the economic and social ministries. Such units already exist in some ministries (e.g. the Ministry of Agriculture, Food and Co-operatives) although in no case are they yet fully staffed. The planning unit, being free from day to day administrative tasks, will provide support to the Principal Secretary and the divisional heads of the ministry concerned in undertaking the tasks outlind above. Each unit will consist of professional staff in the relevant field as well as economists, and in some cases, social planners.

22. The achievement of full coverage will be phased over the five years of the Plan. A start is now being made to set up additional units.

23. By and large, planning units cannot aid implementation greatly, in the sense of putting a project into operation. This is the responsibility of line personnel. The task of the planning unit is rather to ensure that the early preparation of the project is such as to maximize effectiveness in relation to costs, to prepare the project so that it can obtain finance and ensure that the overall programme is in line with the availability of resources. The planning unit can also provide valuable support in providing staff work necessary for rational and effective policy formulation. The unit will also be able to review past projects, to assess whether the intended benefits have resulted from their implementation.

24. The development of a full coverage of planning units will be a lengthy process, not only because of the shortage of planning staff, but also because truly effective planning requires that most of the team should have been seasoned by field experience, as well as having the required professional training. The development of the required cadre of planners, in view of the other demands on scarce manpower, will probably not be complete by the end of the Second Plan period.

25. The role of the Treasury in Plan implementation relates broadly to the financing of the Plan. The Treasury is responsible for mobilizing resources both domestically and externally. It is also responsible for the use of tax policy as a development tool. Monetary policy, debt management and foreign exchange management are other important areas, in which it operates in consort with the Bank of Tanzania. This range of policies are crucial for the maintenance of domestic and external equilibrium, and for the maintenance of a steady growth of resources available for development purposes. During the First Plan, the Treasury has achieved considerable success with resource

mobilization; during the Second Plan the management of the external resource situation is likely to emerge as an increasingly important part of fiscal and monetary policy. The Treasury is also responsible for management of the budget, so as to ensure the finance of the expanding public services and development programmes and at the same time the maintenance of appropriate restraint in costs.

26. Devplan will remain responsible for the co-ordination of overall economic policy, the preparation of the annual review of parastatal investment programmes, the preparation of the Annual Implementation Plan and the identification and elimination of implementation bottlenecks. To carry out these responsibilities it will co-ordinate with ministerial planning units where they exist, and aid ministries in the creation of planning units where they do not. During the First Plan, central planning capacity was not maintained in the period directly following Plan publication; for the Second Plan, every effort is being made to maintain the central planning capacity throughout implementation.

27. Devplan will also be responsible for the development of regional planning capacity and for providing assistance to the regions in the formulation of plans and annual development programmes.

D. *Planning for the parastatal sector.*

28. It is intended that parastatal investment shall more than double during the Plan period, so that by the end of the Plan the parastatal organizations will be investing as much each year as the Central Government. The importance of the sector, however, is even greater than these figures suggest. The parastatals are a direct agency for the promotion of output expansion. The success of their programmes will provide the expanding levels of production from which growth in consumption and in public services can be financed. On the other hand, failure of these programmes would leave the economy stagnant.

29. During the First Plan the parastatal sector expanded into a complex of organizations; in some cases individual parastatals operated in a number of industries and participated in a diverse range of activities Expanding through investments, and through acquisitions following Arusha Declaration, the sector grew to its current importance. Despite this piece-meal development, the parastatals have worked remarkably well, meeting the considerable demands placed upon them. However, with the great new efforts being expected of them, and in light of the systematic re-examination of policy during Plan preparation it was decided that the organizational structure should be rationalized.

30. The new structure, created to facilitate implementation of the Second Plan, has grouped assets so that each parastatal specializes in one industry or closely related group of industries. This has placed clear responsibility for each parastatal in one ministry. It will also enable a proper division of labour to develop, with the resultant development of specialized technical know-how.

31. Each parastatal has been allocated to a parent ministry, in each case that ministry responsible for the sector in which the parastal operates. Thus the agricultural and processing parastatals have been grouped under the Ministry of Agriculture, Food and Co-operatives, the new Tourist Co-operation has been placed under the Ministry of Information and Tourism, etc.

32. The parent ministry will be responsible for overseeing the policies of the parastatal, including review of its investment programmes. It will ensure that the parastatal is efficiently furthering policies as set down in the Plan, and modified from time to time by Government. However, the parastatal will be left

with substantial freedom in the day to day execution of its programme, in light of agreed policies. Such freedom of manoeuvre is appropriate for organizations engaged in commercial activities, for whom standard governmental procedure is not typically appropriate.

33. It is important that not only individual activities of each parastatal should further the sectoral objectives of the nation, but the programme of the parastatal sector as a whole must fit properly into the overall economic picture. This is particularly true of the development spending of the parastatals. The parastatals will lay claim not only to an increasing proportion of the nation's investment resources, but will also be a considerable user of scarce foreign exchange. The total programme of the parastatals each year must be consistent with the maintenance of both domestic and external economic equilibrium.

34. It should be noted that the parastatals are important not only because they implement investment projects, but also because a number of them are important savings institutions, which each year control a considerable flow of investment resources.

35. To ensure the overall co-ordination of the considerable investment programmes of the parastatals, the government is instituting, as a regular annual activity, a two-year forward review of the investment programmes and the resources generated by the parastatal sector. Each year the parastatals will present, through their parent ministries, a summary of the investment projects they have on hand, the cash flow they expect from their operations and their expected source of finance. Devplan, in consultation with the Treasury, will then review the programmes in the light of overall resource availability. A first exercise of this kind has been undertaken in the context of Plan preparation.

F. *Regional Planning.*

36. Achievement of many of the output objectives of the Plan require a high degree of rural mobilization—this is true, for example, of the agricultural targets, as well as for the primary education expansion targets. However, quite apart from this, economic growth will be of little meaning unless the energies of the bulk of the rural population are engaged in development activities and in creative acts of social reconstruction, through the creation of Ujamaa villages. The programmes designed at the centre are aimed to have an impact throughout the country, and a great effort has been made to strike an equitable regional balance. This, however, is but one side of the development picture. On the other side, these programmes require a systematic and enthusiastic response in the regions. Also, in a predominantly rural society, a large amount of potential development activity is not susceptible to central planning, but results from the spontaneous inititatives of local communities.

37. One important task of Plan implementation, therefore, is to allow full scope for such local initiative. Resources must be put at the disposal of the people, technical assistance must be available where required, and co-ordination must be facilitated between the various local efforts and the national pattern of development.

38. The First Plan was not successful in this regard; manpower resources were too scarce and experience too limited to provide for successful planning in the regions. Because of the manpower scarcity, the planning structure outside Dar es Salaam was limited to zonal offices, each covering a number of regions, which tended to be spread so thin as to have only limited impact in the regions. The situation is still far from perfect but improvement is being made.

39. Steps which have been taken to ensure a better regional involvement in the mplementation of this Plan are: —

(a) great effort has been made to ensure that centrally financed projects, both by government and parastatals, are spread more evenly throughout the country than in the First Plan;

(b) certain steps are to be introduced to equalize the advantage of the regions in relation to certain costs of development;

(c) policies are being introduced to decentralize urban development away from Dar es Salaam;

(d) over the Plan, increasing resources will be available to the regions for allocation to regional economic development projects, through the Regional Development funds.

(e) the agricultural targets of the Plan have been broken down into district crop priorities, which will be made available for guidance at the district level;

(f) through a re-allocation of functions, the financial situation of district councils has been put on a much sounder footing, which will enable them to play a more positive development role.

40. This package, taken together, will enable the regions to play a much more vital part in Plan implementation. To aid in the development of planning activities at the regional level, particularly in relation to the disposal of the Regional Development Fund, but also to assess the long-term development prospects and identify development possibilities, planning capacity is being created at the regional level.

41. In addition, the Ujamaa development programmes will have a profound mpact; TANU and Maendeleo will be providing leadership training and technical advice and support to Ujamaa developments throughout the country.

GLOSSARY

Ministry	*Telegraphic Address*
President's Office	CABINET
Central Establishment Division	ESTABS
Foreign Affairs	FOREIGN
Regional Administration and Rural Development	MAENDELEO
Agriculture, Food and Co-operatives	KILIMO
Finance	TREASURY
Second Vice-President's Office	MAKAMU
Economic Affairs and Development Planning	DEVPLAN
Commerce and Industries	MINCOM
Communications, Transport and Labour	COMWORKS
National Education	EDUCATION
Lands, Housing and Urban Development	LANDSURVEY
Home Affairs	HOME
Information and Tourism	MAELEZO
Health and Social Welfare	HEALTH

Parastatal	*Abbreviation*
Tanzania Electrical Supply Co. Ltd.	TANESCO
National Development Corporation	N.D.C.
National Small Industries Corporation	N.S.I.C.
State Trading Corporation	S.T.C.
Tanzania Tourist Corporation	T.T.C.
National Parks	PARKS
National Housing Corporation	N.H.C.
Mwananchi Engineering and Construction Co.	M.E.C.C.O.
National Agriculture and Food Corporation	N.A.F.C.O.
Tea Authority	
Tanzania Sisal Corporation	T.S.C.
The National Milling Corporation	N.M.C.
Lint and Seed Marketing Board	L.S.M.B.
Tanzania Tobacco Board	T.T.B.
National Agricultural Products Board	N.A.P.B.
National Dairy Board	N.D.B.
National Development Credit Agency	N.D.C.A.
National Co-operative Bank	N.C.B.
National Sugar Board	N.S.B.
Tanzania Pyrethrum Board	T.P.B.
Tanzania Sisal Marketing Board	T.S.M.B.
Tanzania Coffee Board	T.C.B.
National Co-operative and Development Bank	N.C.D.B.
National Bank of Commerce	N.B.C.
National Insurance Corporation	N.I.C.

GLOSSARY—*contd.*

Parastatal	*Abbreviation*
EAST AFRICAN COMMUNITY	E.A.C.
EAST AFRICAN AIRWAYS CORPORATION	E.A.A.
EAST AFRICAN RAILWAYS CORPORATION	E.A.R.
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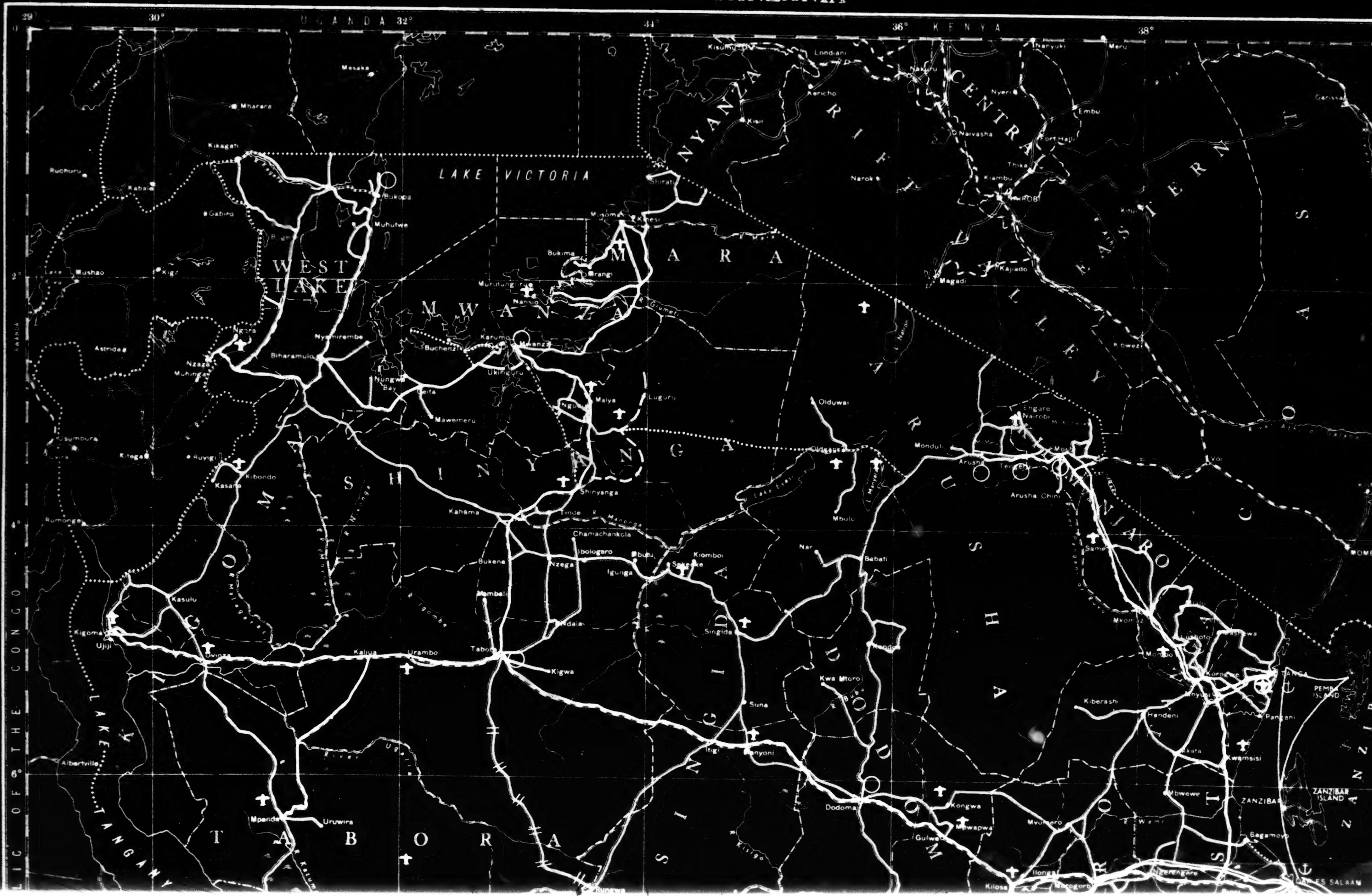

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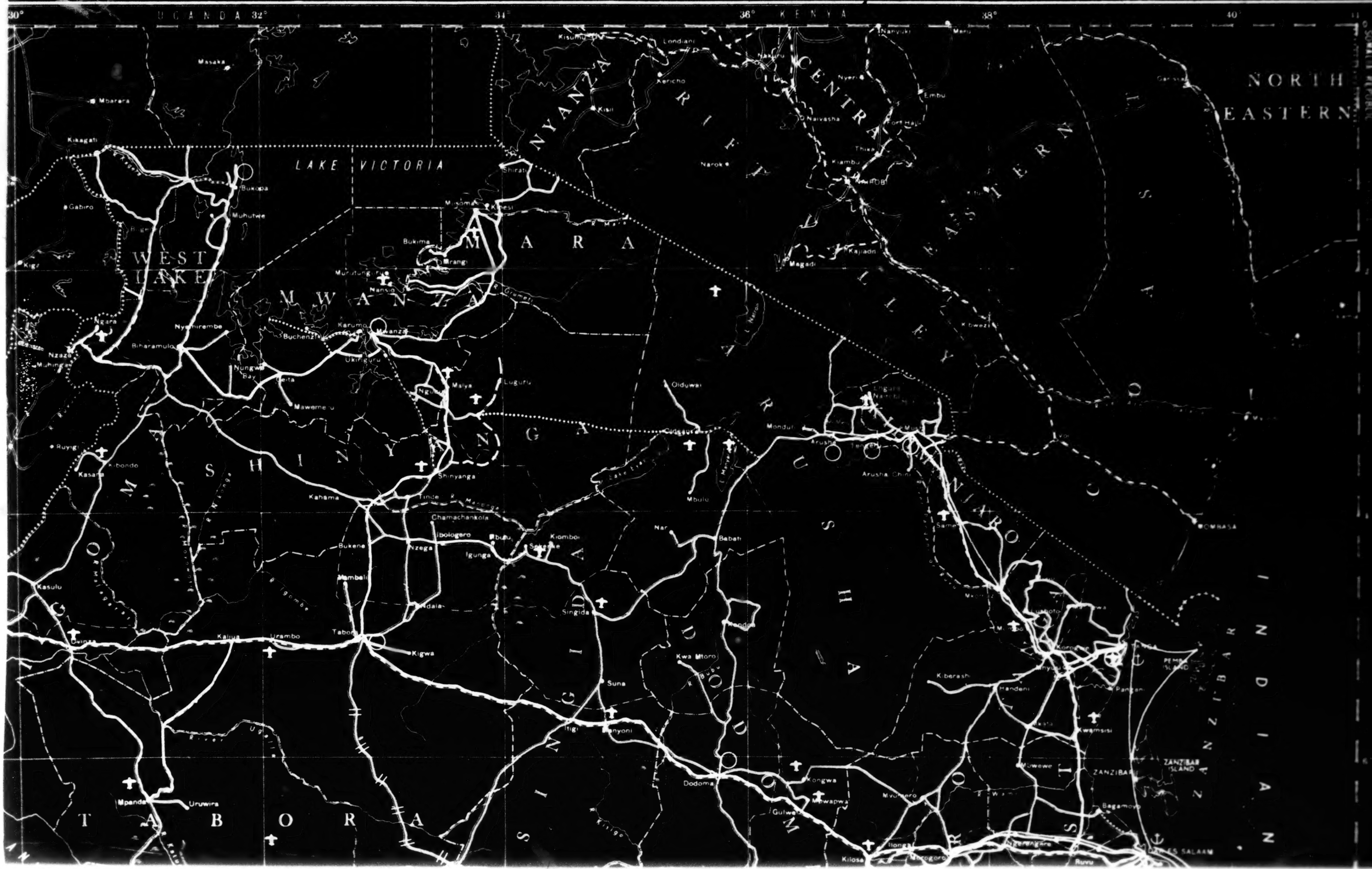

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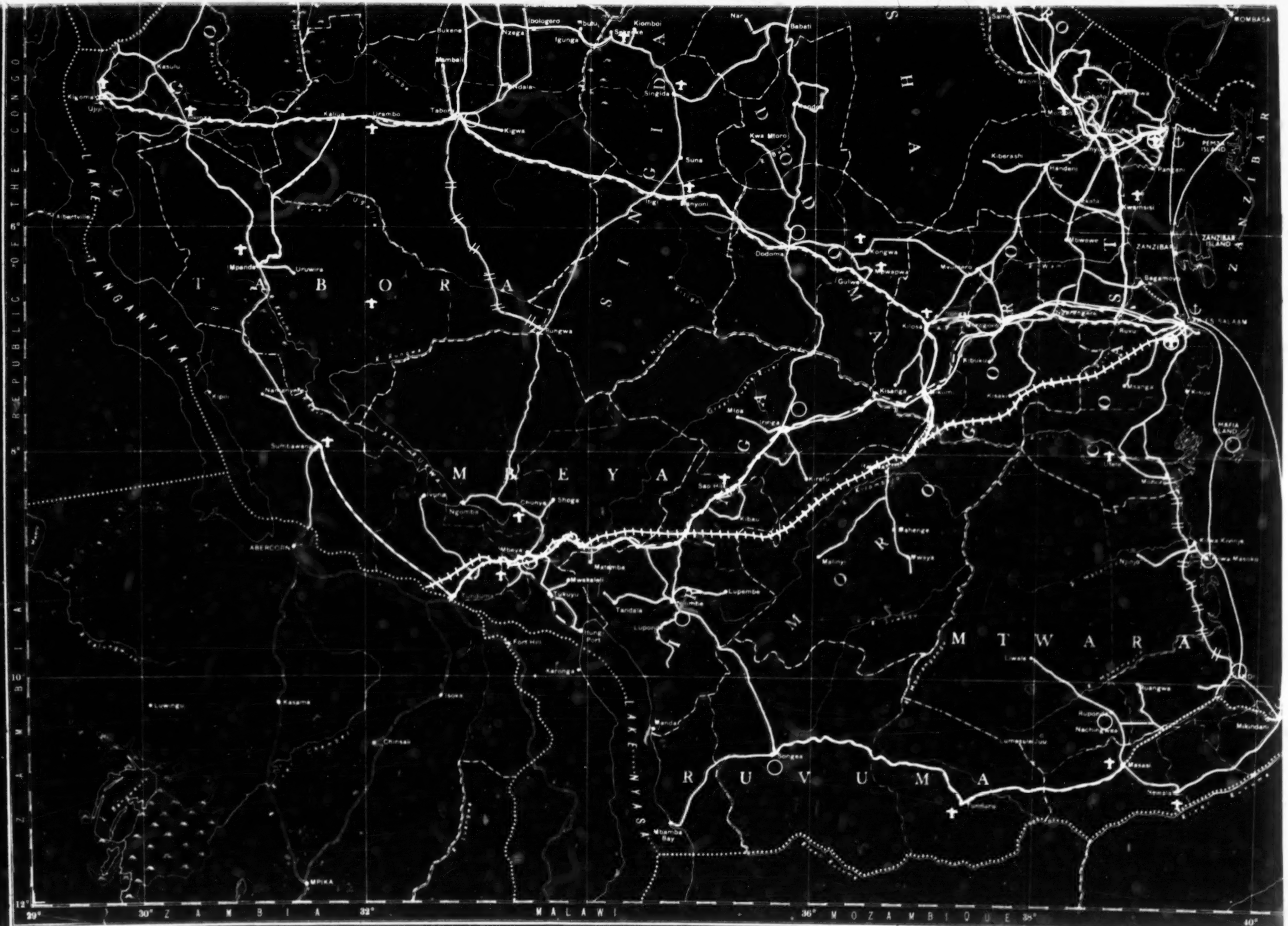
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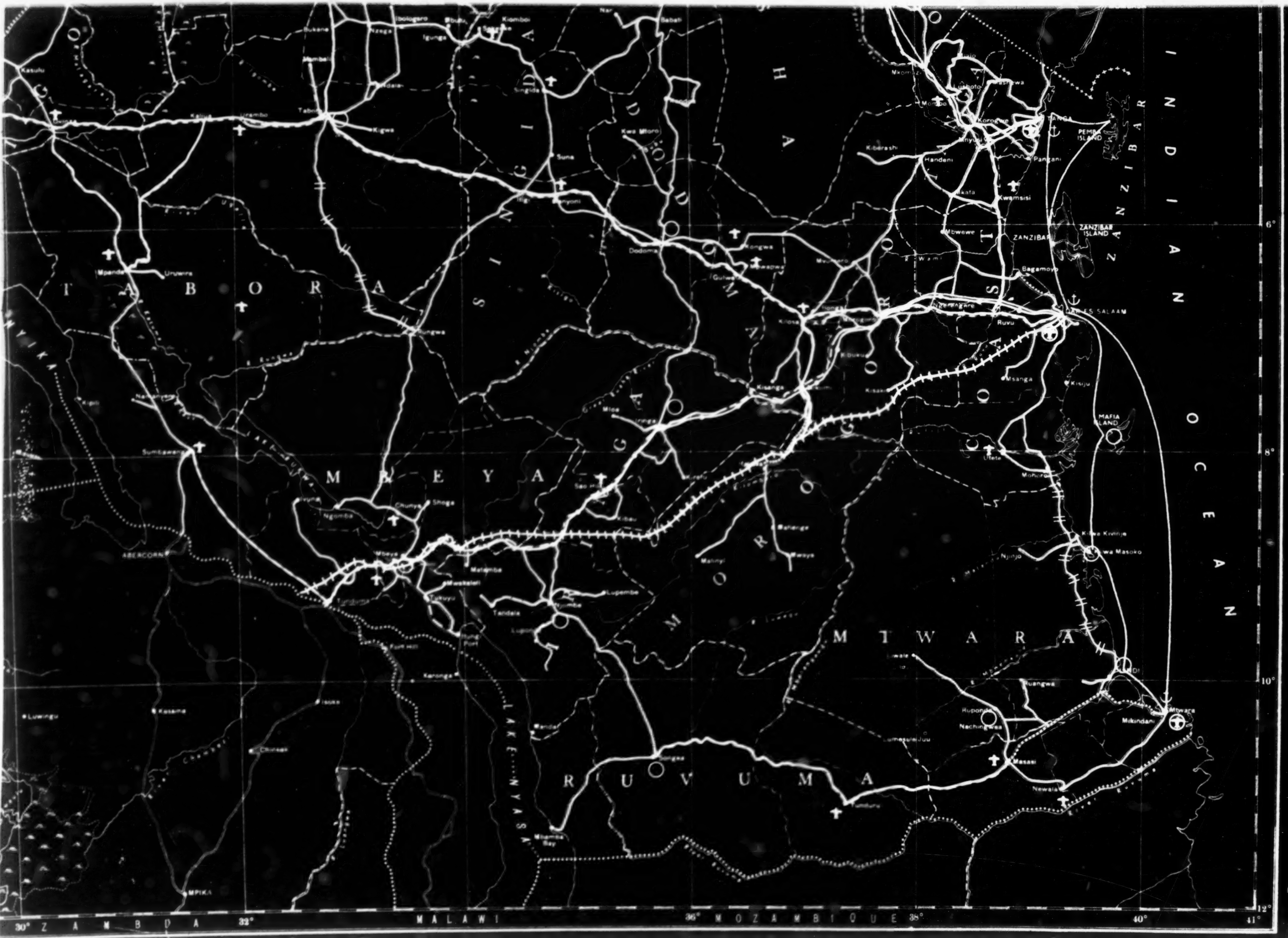
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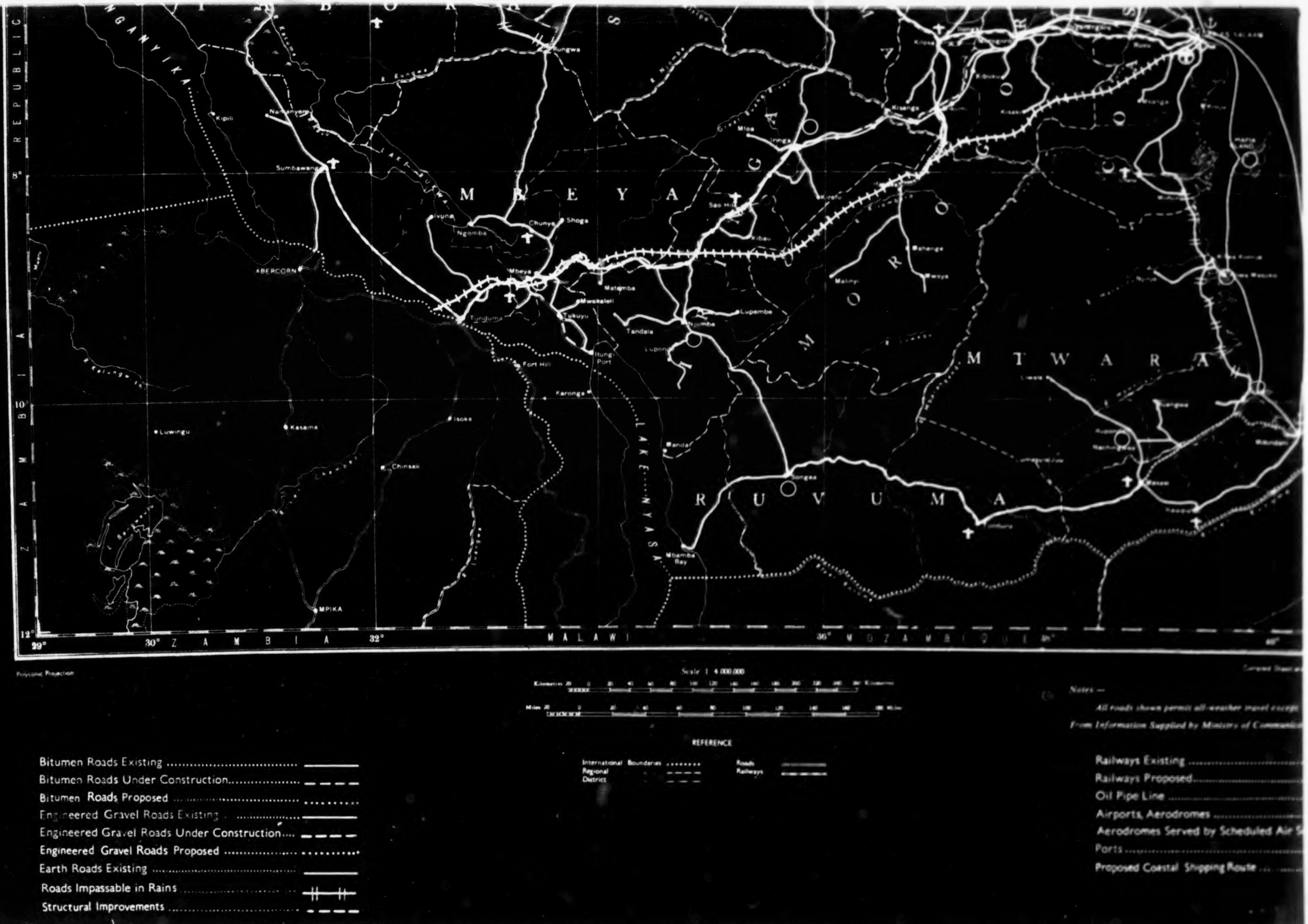
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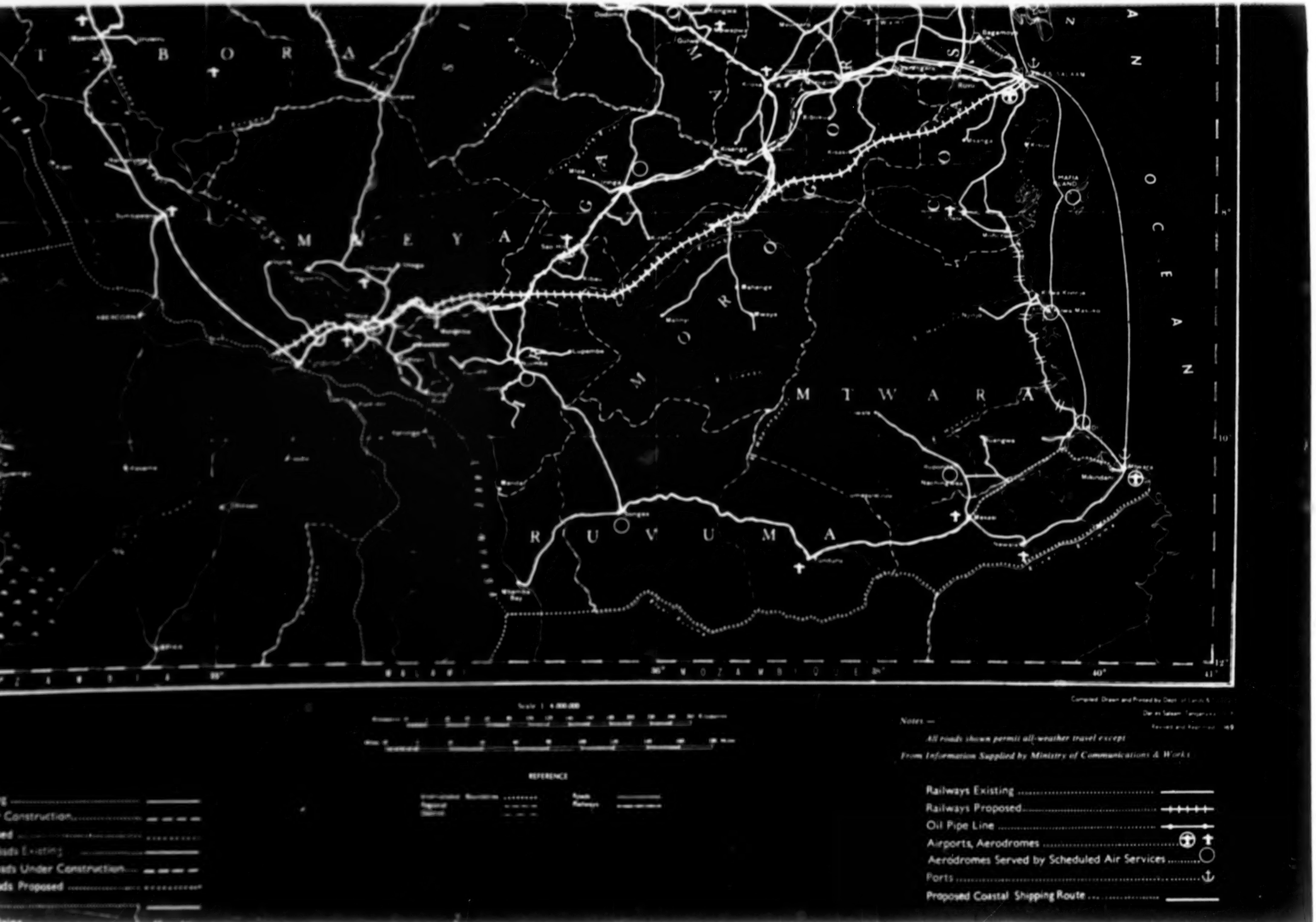
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# Second Five-Year Plan
for
Economic and Social Development

1st July, 1969 - 30th June, 1974

VOLUME II

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CHAPTER I

INTRODUCTION

The over-all objectives, strategy and targets for the Second Five-Year Development Plan are explained in Volume I. Volume I also broadly outlines some important aspects of the development programme of the public sector and the level of investment expected from the Parastatals, East African Corporations and the Private Sector. A total investment of Shs. 8,085 million, excluding the external component of TanZam railway, is expected to be undertaken during the five years in order to achieve the objectives and targets set before the nation.

Volume II provides a detailed description of those programmes which are to be financed through the Central Government and Parastatals.

First Plan Performance.

A high rate of growth in investment was experienced throughout the first plan period. Total ministerial development expenditure which increased from Shs. 183·6 million in 1964/65 to Shs. 219·8 million in 1965/66 or by 19·7 per cent rose further by 18 per cent to Shs. 258 million in 1966/67 and by 19·5 per cent to Shs. 308 million in 1967/68. This trend is also expected to continue during the last year of the plan. Rough estimates show that total investment expenditure by ministries during 1968/69 may be 15–16 per cent higher compared to the previous year. This will bring plan performance, in terms of development expenditure by ministries to over 83 per cent. Excluding the carry-over from the three year Plan, the monetary investment performance rate may amount to over 91 per cent. In real terms 70–75 per cent of the planned investment target would seem to have been achieved.

Comworks, Kilimo, Maendeleo, Maelezo and Defence and National Service would exceed their planned investment targets. Investment by Health, Mincom, Utawala, Landsurvey and Education however fell short of the targets. Continuous review, short-term exigencies and shifts of emphasis during the plan period somewhat altered original plan priorities. Comworks' programme was dominated by the development of TanZam transport facilities.

The share of Comworks in total development expenditure may therefore be nearly 37 per cent compared to 25 per cent originally planned. Similarly, with the relatively greater emphasis on agriculture, rural development and tourism in the later years of the Plan, the respective shares of Kilimo, Maendeleo and Maelezo may be 10·4, 3·6 and 2·2 per cent compared to 8, 2 and 1·3 per cent originally planned. The share of Defence and National Service may be over 7 per cent compared to less than 4 per cent originally envisaged. These upward shifts were achieved partly by changes in agricultural strategy, de-emphasising settlement schemes of Landsurvey and partly by economies achieved in the Education programmes without sacrificing its physical targets. Table I shows plan performance, excluding contributions to Parastatals and chart I shows the comparison of relative planned shares and estimated actual shares of different Ministries in total development expenditure.

TABLE I

ESTIMATED PLAN PERFOMANCE (EXPENDITURE)—1964/69

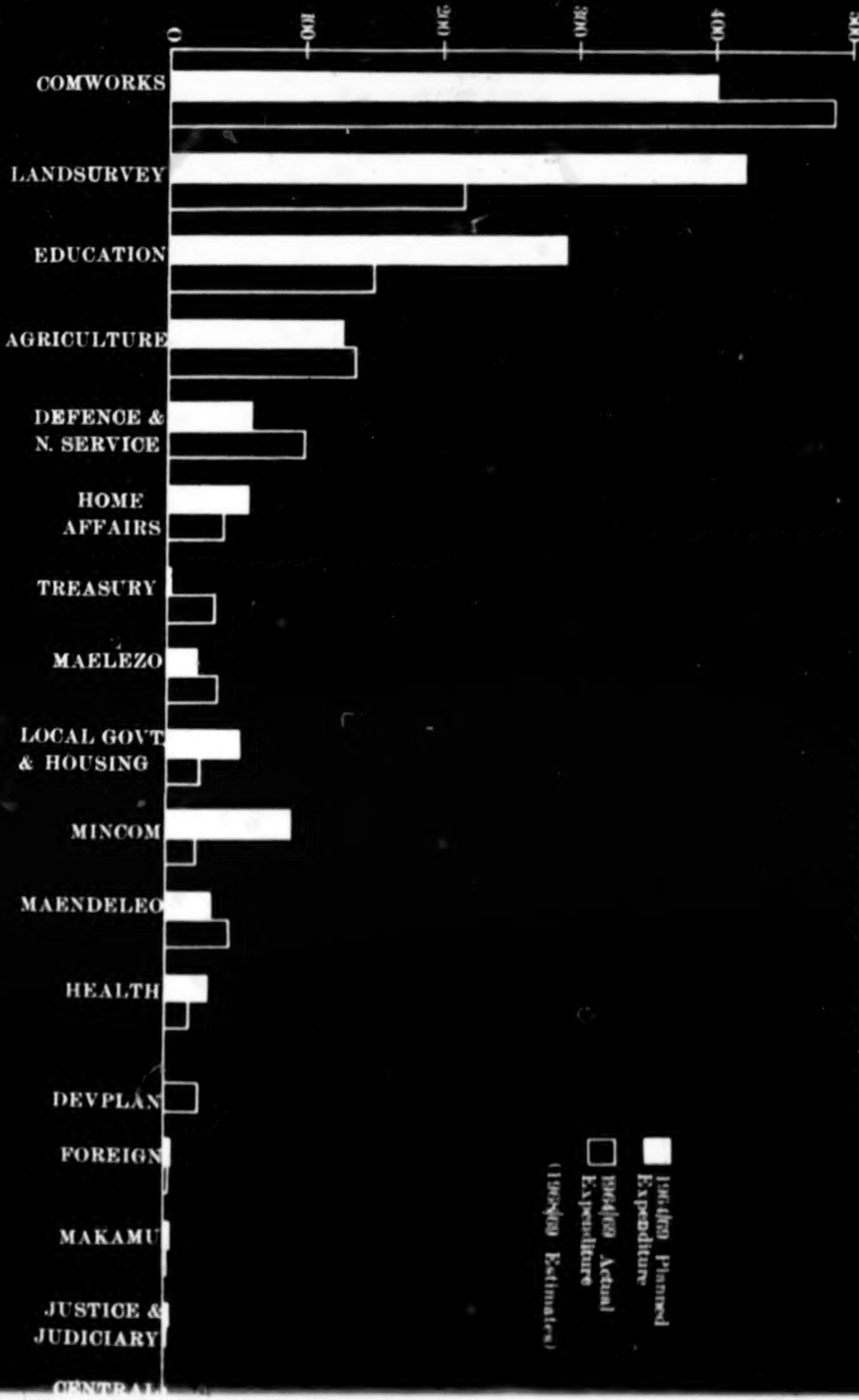
'000 Shillings

MINISTRY	1964/68 Actual Expenditure	1968/69 Estimated Expenditure	1964/69 Estimated Expenditure	1964/69 Planned Expenditure including Three-Year Plan carry-over	Relative share of Planned Expenditure	Estimated 1964/69 Expenditure as % of the total	Plan Performance (%)
Comworks (inc. Labour) ...	307,221	177,000	484,221	400,258	24·99	36·66	120·9
Landsurvey ...	166,281	48,431	214,712	420,750	26·28	16·24	51·0
Education ...	138,390	10,982	149,372	289,340	18·06	11·28	51·6
Agriculture ...	92,117	44,716	136,833	126,170	7·88	10·35	108·4
Defence and National Service ...	71,867	28,000	99,867	60,662	3·79	7·53	164·8
Home Affairs ...	38,447	3,684	42,131	57,486	3·59	3·26	73·1
Treasury ...	33,285	1,070	34,355	3,000	0·19	2·58	1,145·1
Information ...	27,777	1,100	28,877	20,880	1·31	2·17	138·8
Local Government and Housing ...	18,477	5,204	23,681	54,000	3·37	1·78	43·8
Mincom (inc. Co-op.) ...	20,822	1,072	21,894	92,204	5·75	1·64	23·7
Maendeleo (exc. Reg. Adm.) ...	23,133	24,076	47,209	32,792	2·04	3·57	143·9
Health ...	13,722	3,820	17,542	31,800	1·99	1·30	55·1
Devplan ...	12,525	1,440	13,965	—	—	1·13	—
Foreign ...	3,532	190	3,722	6,000	0·37	0·28	62·0
Second Vice-President's Office ...	1,437	—	1,437	3,018	0·19	0·10	47·5
Justice and Judiciary ...	1,002	252	1,254	3,198	0·20	0·08	39·2
Central Establishments ...	381	255	636	—	—	0·05	—
Total ...	970,416	351,292	1,321,708	1,601,558	100·00	100·00	82·6

Source.—Ministry of Economic Affairs and Development Planning.

Chart 1

PLAN PERFORMANCE BY MINISTRY (1964/69)



The increase in individual ministries' development expenditure from year to year was rather erratic, depending partly on project preparation and partly on the determination of annual priorities. The growth of total ministerial expenditure from year to year excluding some building construction, was significantly higher than the over-all growth rate.

During the plan, ministries' capacity to spend increased gradually and the ratio of actual development expenditure to estimates increased continuously. It was the implementation capacity more than the shortage of funds which held down the rate of implementation of government development projects.

Experience with first plan implementation in Tanzania shows that a mixture of lack of adequate project preparation, shortage of skilled manpower and constraints in construction capacity appeared as major bottlenecks in varying degrees. Some building programmes had to be postponed or deferred due to lack of capacity in construction industry in spite of the use of foreign consultants and contractors. Construction activity will continue to claim heavy expenditure during the Second Plan.

The implications of first plan experience in the implementation of government development programmes are two fold:

(1) a larger number of projects should be ready for implementation than can be actually implemented;

(2) the capacity of construction industry must be enhanced.

In order to rectify these obstacles in the rate of implementation, action has already been initiated. Top priority accorded to the establishment of Planning Units in ministries and the scheme to allocate funds to ministries in each year of the next plan for preparation of projects intended for implementation in the succeding year is expected to improve the state of project preparation. Priority accorded and high allocations made for construction industry both in the public and private sectors in the Second Plan programme are expected to enhance construction capacity.

With the availability of financial resources threatening to become a major limitation on development spending, the Second Plan programme is based upon the minimization of costs in the design of projects and emphasizes vigorous assessment of the economic and social benefits to be expected from projects given priority.

The Second Plan programme contained in this volume is the result of elaborate discussions the Ministries and Parastatals on projects and programmes designed to achieve the Second Plan objectives and targets. Detailed information was scrutinized for projects to be started during the first two years of the plan, both from the point of view of cost minimization and social and economic benefits. This resulted in a two-year forward programme of implementation. Some of these projects spill-over in the last three years of the Plan. Projects to be started in the last three years of the Plan were also studied with the same vigorous criteria, though considerably more information was essential. Considerable flexibility is provided in the whole programme, subject to change depending on the merits of the projects/programmes and measures taken to enhance the implementation capacity. The two year detailed implementation of projects and the five year programme thus arrived at were broadly influenced by:

(1) first plan experience, the growth in development effort of each Division of the Ministries—(rough measure of the capacity to implement);

(2) bias as reflected by second Plan strategy, objectives and targets;

(3) previous commitments.

Second Plan Investment Targets.

Total anticipated investment of Shs. 8,085 million is broken down as follows: —

	Shs. million	Share per cent
(a) Central Government (excluding Contribution to Parastatals)	3,055	37·8
(b) Parastatals and Co-operatives	2,300	28·4
(c) East African Corporations	580	7·2
(d) Private Sector	2,150	26·6

While East African Corporations' investment target is based on their plans, the division of investment into major sectors is based on the following assumptions:

(a) The ministerial investment expenditure is likely to grow at about 10 per cent per annum.

(b) Parastatal and Co-operatives' investment is expected to experience a high growth rate, of about 20 per cent per annum, as a result of government's additional responsibilities in the productive sector, as emphasized in Volume I.

(c) Expansion in the Private Sector is expected to be limited to 7 per cent per annum.

The Pattern of Investment.

The pattern of investment has to be supported by the existing structure of the economy. However, sectors which are critical for economic growth at the present stage of development have been adequately emphasized. The overall social philosophy and the national objectives have had an over-riding influence in determining the overall pattern of investment. The relative importance given to investment in different sectors and within each sector is finally determined by the strategy of development (targets and policies). Investment can be broken down into four major categories:

1. investment for superstructure i.e. investment in directly productive projects in industry, agriculture, tourism, etc.;
2. investment for building up the economic infrastructure i.e. for communications, technical education, water, power, research and basic agricultural in industry, agriculture, tourism, etc.;
3. investment in creating the social infrastructure i.e. for non-technical education, national health and housing, etc.; and
4. investment for strengthening security measures i.e. in defence, police and prisons, etc.

Details of projects included in each sub-category are given in Chapter III (section ii). First Plan targets envisaged an investment in the central government sector including contributions to Parastatals of about 18 per cent in directly productive investment, about 65 per cent in economic infrastructure, 12 per cent in social infrastructure and about 5 per cent for security.

Excluding contributions to Parastatals, these percentages work out to be 7·4 per cent, 77 per cent, 9 per cent and 6 per cent respectively. The relative importance of building up economic infrastructure and making investment in directly productive projects was clearly brought out. During the execution of the plan, however, some priorities were re-determined, some important projects lagged behind due to inadequate preparation and in certain cases adequate capacity in some sectors was lacking to undertake the planned level of investment. Also costs of certain projects were originally underestimated and various other projects were expanded, some for making them economically viable and others due to rapidly expanding needs. Contributions to Parastatals were much less than anticipated, partly because of capacity problems and partly due to competing demand for funds. It is now anticipated that actual investment during the First Plan in directly productive activity may come to only 7·6 per cent of the total expenditure undertaken compared to about 18 per cent anticipated, on the other hand economic infrastructure claimed about 74 per cent of the total expenditure compared to 65 per cent planned. Investment in security at 8 per cent was also higher than about 5 per cent planned. Within the sectors, investment in industry lagged considerably while investment on communications (roads and aerodromes) was unproportionately high.

Excluding contributions to Parastatals, Central Government expenditure during First Plan in the directly productive sector may be expected to be only 4·1 per cent in economis infrastructure 81·4 per cent, in social infrastructure 5·9 per cent and for security about 8·6 per cent.

Some General Considerations.

Investment targets for directly productive activity must take into account the lags in investment during the first five years of the development efforts as well as the considerable import substitution potential which still remains unexploited. Scope for import substitution exists both in industry (consumer goods, intermediate goods and especially building materials) and agriculture (the goal of self-sufficiency in food). Directly productive investment in agriculture must also be emphasized if the goal of self-sufficiency in food during the Second Plan is to be achieved and also if an improvement is to be made in the living standards of the 95 per cent of the population. Also investments in industry cannot be sustained without substantial improvements in the productive capacity of the agricultural sector. Both the supply of industrial raw materials and consumers' demand for industrial products are closely related to what happens to agricultural incomes. While investment in directly productive agricultural activity to reach certain targets is essential, investment in agricultural infrastructure to improve facilities for use of the majority of the farm population is equally important. On the other hand, productive investment also cannot be over-emphasised as experience in many countries shows that sooner or later development slows down due to lack of development in social and human factors. Though the determination of allocation funds for social services in the ultimate analysis is a matter of broad social considerations, general scarcity of overall resources has to be kept in view. A balance between different sectors has, therefore, to be created. In the developing countries, human need is clearly great. But, in view of the limited resources, caution will have to be exercised and some sort of a selective approach followed. On the other hand, social services are very important in that they contribute directly to improvement in the quality of life and help raise productivity of the working population, contributing indirectly to increase in output. The reasonable balance between directly productive effort, investment in economic infrastructure and social development is finally derived after studying the sectoral requirements and the projects offered to meet them.

The determination of the pattern of investment has therefore involved continuous re-adjustment of the plans at the ag[illegible]egate, sectoral and project levels until a consistent and feasible level and pattern of investment was finally reached.

The Central Government.

Investment in industry, agriculture and tourism, etc. i.e. directly productive investment is allocated about 8 per cent of the total investment, excluding contributions to Parastatals, compared to 7·4 per cent planned and about 4 per cent realized during the First Plan. Besides, about 17 per cent of the Central Government's resources will be contributed for productive investment through the Parastatal Sector.

In the economic infrastructure category, roads and aerodromes claim a high proportion of about 30 per cent of the total investment expenditure to be undertaken in the Central Government sector. This compares with 28 per cent actually spent and about 17 per cent planned for the First Plan. The high allocation is, however, influenced by the TanZam Highway. Most of the funds for the Highway however come from abroad, yet their expected impact on the economy requires considerable stepping up of industrial and agricultural production. Technical education, including secondary education is allocated 9·5 per cent compared to 14·8 per cent spent in this category during the First Plan. In absolute amounts, however, the amounts thus allocated are higher than those spent during the First Plan. With a considerable infrastructure having already been built, the need for capital investment during the Second Plan will be proportionately less. Reserch, Surveys and Investigations are allocated 6·2 per cent compared to 6·4 per cent planned and about 9·6 per cent actually spent during the First Plan. Though in percentage terms, less importance is given to research, in absolute amounts about the same amount as spent during the First Plan will become available, Basic agricultural improvements are allocated 5 per cent compared to 14 per cent planned and 8·4 per cent actually spent during the First Plan. Again in absolute amounts funds allocated will be higher than those spent during the First Plan. The category "others" in economic infrastructure claims another 12 per cent. Most of the expenditure in this category is related to agricultural development. This also includes the "Regional Development Fund" which is expected to increase from Shs. 20 million in 1968/69 to over Shs. 40 million by the end of the Second Plan. Economic infrastructure continues to be emphasized during the Second Plan also and thus claims about 76 per cent of the total expenditure envisaged for the Second Plan.

Social infrastructure is allocated about 11·5 per cent of the total compared to 9·3 per cent planned and 6 per cent actually spent. Primary education and adult education will absorb 4·4 per cent, National Service 1 per cent, Housing about 2 per cent, Health 3·2 per cent and "others" 1 per cent. In absolute amounts, total expenditure envisaged in building up social infrastructure will be more than two and half times of that actually spent during the First Plan.

The fourth major category "Security" has been allocated 6 per cent of the total expenditure compared to 6 per cent planned and about 8·5 per cent actually spent during the First Plan.

Consistent with the strategy for the Second Plan, expenditure in the directly productive sector, agricultural infrastructure, non-technical education and health and housing is expected to increase at a much higher rate than the average. Special attention will have to be paid in increasing the capacity of these sectors.

Administratively, six Ministries will be responsible for 89 per cent of the total public sector investment target; Comworks 33·5 per cent, Kilimo 23 per cent, Landsurvey 11·3 per cent, Education 10·8 per cent, Maendeleo 6·6 per cent and Health 3·6 per cent. Considerable work on behalf of other ministries will be undertaken by the Building Division of Comworks. Detailed division-wise investment targets are given in the Summary Tables in Chapter III.

Parastatals.

During the Second Five-Year Plan, total investment by all Parastatals is anticipated to be in the region of Shs. 2,300 million. A major part of this investment is accounted for by the expansion programmes of Tanesco, National Development Corporation, Tanzania Agricultural and Food Corporation, Tanganyika Tourist Corporation and the National Housing Corporation. Substantial investment is also expected by Tanzania Sisal Corporation and the Tea Authority, besides considerable expansion of storage capacity by N.A.P.B. and L.S.M.B. N.D.C.A.'s activities in medium-term lending for agriculture and small business and industrial development are also expected to expand considerably. Out of a total expected investment of Shs. 2,300 million, investment by all Parastatals during the first year of the Plan 1969/70 is likely to be of the order of Shs. 330 million. The Parastatal activities are expected to be financed from internal cash flows, external and domestic borrowing, minority private equity investment, allocation of some of Government external borrowing and by some contributions of local finance by the Government. Financing Parastatals' investment is expected to take a growing share of both domestic development finance and funds raised externally during the Second Year Plan. While a substantial expansion in parastatal profits is already taking place, for financing the greatly expanded programme in directly productive activity, considerable finance will be required from outside the sector throughout the plan period. In the long-run however, these activities are expected to become basically self-financing. In the initial years Government aims at extending all possible assistance to Parastatals in making them self-supporting.

Most of the Central Government investment in directly productive investment will be undertaken through the Parastatals. Over 60 per cent of the total of Shs. 2,300 million investment envisaged by the Parastatals will be in industry, agriculture, tourism and commerce, etc. Industry will claim the major share, about 34 per cent of the total, agriculture about 13 per cent, tourism about 10 per cent and commerce, trade and transport 3 per cent. About 20 per cent will be invested in "power" and another 15 per cent in Housing. The considerable stepping up of investments in the Parastatal sector will depend upon the success of the steps taken to enhance the capacity of the Parastatals to undertake development effort. This will demand special allocation during the Second Plan and Government help, direction and control will be vitally important for the successful execution of the programme of this sector. These allocations have been derived from the individual parastatal programmes and plans of action.

East African Community.

The investment programme of Shs. 580 million is expected to be mainly in the area of communications and transport.

Private Sector.

The role of the Private Sector in the development effort of the Second Plan is proportionately less than envisaged during the First Plan, but in absolute amounts it is envisaged that private investment may be about equal that made during the First Plan. During the First Plan, the share of private investment is estimated at over 50 per cent. The Second Plan envisages a contribution of about 25 per cent. Most of the private investment (60 per cent) is expected to be in directly productive activity; in industry (a large amount in the construction industry), in agricultre, in tourism and in trade, commerce and transport. The other 40 per cent may be categorised as social infrastructure, 38 per cent in housing and other buildings and perhaps 1 per cent each in health and education (through Voluntary Agencies).

The details of overall anticipated investment in different sectors of the economy are given in Chapter III. It may be noted that about 38 per cent of the total planned investment is expected to be in directly productive activity, about 44 per cent in economic infrastructure, about 16 per cent in social infrastructure and 2 per cent on "Security".

CHAPTER II

PROJECT CLASSIFICATION

A new system of classification and numbering projects has been adopted for the Second Five-Year Plan. The system permits easy identification of projects and is useful for grouping projects into various categories for analysis purposes. The programme for the Second Five-Year Plan is listed by Ministry and Divisions.

Each project included in the Second Five-Year Plan has a Code number. The Code number consists of four digits, the first two digits indicate the economic classification of the project, the first digit indicating one of the six main categories in economic classification, e.g.

10—Directly Productive Activities.
20—Research, Surveys and Investigations.
30—Power, Water and Sanitary Services.
40—Other Economic Infrastructure.
50—Social Infrastructure.
60—Administration and Security.

The second digit indicates the sub-head in the main category, e.g. in the category 40—Other Economic Infrastructure:

41—Roads and Aerodromes.
42—Communications and Broadcasting.
43—Technical Education and Training.
44—Agricultural Improvement—Crops, etc.

The last two digits indicate the number of projects within the sub-head of economic classification in a particular ministry. For example, all Kilimo projects within the sub-head Agricultural improvement in crops will have a code number:

4401
4402
4403
4404, etc.

All projects have been thus numbered. Details of projects included in each sub-category are given in Chapter III (section II).

CHAPTER III

SUMMARY TABLES

(i) CENTRAL GOVERNMENT DEVELOPMENT EXPENDITURE 1969/70—73/74

Ministry/Division	1969/70	1970/71	1971/72-1973/74	Total Second Plan	% Share
President's Office	53,000	48,000	88,000	189,000	—
Central Establishments	6,000,000	9,000,000	15,000,000	30,000,000	1·1
Ministry of Regional Administration and Rural Development:					
Rural Development Division	25,021,395	32,489,100	110,010,000	167,520,495	6·2
Local Government Division	500,000	1,100,000	1,832,800	3,432,800	0·1
Regional Administration Division	1,930,400	2,565,800	4,930,000	9,426,200	0·3
Total ...	27,451,795	36,154,900	116,772,800	180,379,495	6·6
Ministry of Foreign Affairs	2,600,000	4,000,000	4,700,000	11,300,000	0·4
Second Vice-President's Office	171,000	162,000	59,000	392,000	—
Defence	40,000,000	35,000,000	29,952,664	104,952,664	3·9
National Service	6,857,800	10,019,690	8,122,700	25,000,190	0·9
Judiciary	290,000	250,000	530,000	1,070,000	—
Ministry of Agriculture, Food and Co-operatives:					
Water Development and Irrigation Division	26,080,000	32,750,000	127,770,000	186,600,000	6·8
Agriculture and Food Division	13,671,550	17,643,000	68,108,750	99,423,300	3·6
Production Division	16,831,250	13,915,100	69,643,650	100,390,000	3·7
Training and Research Division	13,667,450	18,090,750	78,059,550	109,817,750	4·0
Natural Resources Division	16,422,700	20,965,600	82,532,700	119,921,000	4·3
Co-operative Development Division	819,000	968,500	3,113,000	4,900,500	0·2
Administration and Planning Division	1,376,800	2,556,800	10,558,600	14,492,200	0·5
Total ...	88,868,750	106,889,750	439,786,250	635,544,750	23·1

CENTRAL GOVERNMENT DEVELOPMENT EXPENDITURE (*contd.*)

Ministry/Division	1969/70	1970/71	1971/72-1973/74	Total Second Plan	% Share
Ministry of Economic Affairs and Development Planning	3,500,000	4,600,000	5,200,000	13,300,000	0·5
Ministry of Natinal Education:					
Primary Education	15,977,000	20,899,000	84,340,000	121,216,000	4·4
Secondary Education	23,377,500	28,502,000	35,362,000	87,241,500	3·2
Technical and Commercial Education	900,000	3,230,000	4,900,000	9,030,000	0·3
Training of Teachers	9,380,000	11,946,000	11,124,000	32,450,000	1·1
University Education	2,525,000	11,142,000	16,917,500	30,584,500	1·1
Other Projects	2,162,000	1,935,000	6,465,000	10,562,000	0·4
Culture and Antiquities	1,890,000	3,119,000	1,043,300	6,052,300	0·2
Total ...	56,211,500	80,773,000	160,151,800	297,136,300	10·8
Ministry of Commerce and Industries:					
Minerals Division	6,411,840	5,730,400	13,799,960	25,942,200	0·9
Industries Division	1,205,040	—	—	1,205,040	—
Rural Electrification	—	1,000,000	4,000,000	5,000,000	0·2
Total ...	7,616,880	6,730,400	17,799,960	32,147,240	1·1
Ministry of Communications, Transport and Labour:					
Roads and Aerodromes Division	264,780,000	250,670,000	301,550,000	817,000,000	29·7
Building and Housing	14,431,751	14,190,467	57,879,053	86,501,271	3·1
Others	2,048,000	3,048,000	13,762,000	18,858,000	0·7
Total ...	281,259,751	267,908,467	373,191,053	922,359,271	33·5
Ministry of Lands, Housing and Urban Development:					
Land Division	8,935,500	9,674,500	26,980,000	45,590,000	1·7
Survey Division	5,020,000	5,390,000	17,075,000	27,485,000	1·0
Valuation Division	—	101,700	67,800	169,500	—
Town Planning Division	9,400,000	16,700,000	53,810,000	79,910,000	2·9
Urban Water Supplies Division	21,700,000	29,400,000	105,400,000	156,500,000	5·7
Total ...	45,055,500	61,266,200	203,332,800	309,654,500	11·3

CENTRAL GOVERNMENT DEVELOPMENT EXPENDITURE (*contd.*)

Ministry/Division	1969/70	1970/71	1971/72-1973/74	Total Second Plan	% Share
Ministry of Home Affairs:					
Police	5,390,000	5,800,000	47,210,000	58,400,000	2·1
Prisons	3,300,000	3,000,000	4,500,000	10,800,000	0·4
Immigration	396,750	398,290	1,004,960	1,800,000	0·1
Total ...	9,086,750	9,198,290	52,714,960	71,000,000	2·6
Ministry of Health and Social Welfare:					
Training	1,677,000	180,000	501,000	2,358,000	0·1
Public Health Programme	3,842,000	3,719,000	23,402,500	31,025,500	1·1
Hospital Services	7,807,000	9,260,500	38,968,590	56,036,090	2·0
Ancillary and Special Services	1,291,000	620,000	2,424,000	4,335,000	0·2
Welfare and Probation	1,994,000	1,092,000	1,984,000	5,070,000	0·2
Total ...	16,613,000	14,931,500	67,280,090	98,824,590	3·6
Ministry of Information and Tourism:					
Information Services and Broadcasting...	1,450,000	3,500,000	7,800,000	12,750,000	0·5
Tourism	600,000	250,000	3,150,000	4,000,000	0·1
Total ...	2,050,000	3,750,000	10,950,000	16,750,000	0·6
GRAND TOTAL ...	593,685,726	650,682,197	1,505,632,077	2,750,000,000	100·00

(ii) SECOND FIVE-YEAR PLAN (1969/70-1973/74)
ECONOMIC CLASSIFICATION OF DEVELOPMENT EXPENDITURE
CENTRAL GOVERNMENT

	Expenditure '000	% Share
10—*Directly Productive Activity*		
11—Mining	—	—
12—Manufacturing and Processing	28,280	1·03
13—Agriculture—Food	44,308	1·61
14—Agriculture—Commercial Crops	67,662	2·47
15—Agriculture—Livestock and Fishery	39,654	1·44
16—Tourism	25,650	0·93
17—Others	11,599	0·42
Total ...	217,153	7·90
20—*Research, Surveys and Investigations*		
21—Agricultural Research	48,655	1·77
22—Other Research	40,391	1·47
23—Surveys and Investigations	81,955	2·98
Total ...	171,001	6·22
30—*Power, Water and Sanitary Services*		
31—Electricity	5,000	0·18
32—Rural Water and Sanitary Services...	83,600	3·04
33—Urban Water and Sanitary Services	156,500	5·69
34—Others	—	—
Total ...	245,100	8·91
40—*Other Economic Infrastructure*		
41—Roads and Aerodromes	813,000	29·56
42—Communication and Broadcasting...	13,036	0·47
43—Technical Education and Training	260,114	9·46
44—Agricultural Improvement—Crops	27,261	0·99
45—Agricultural Improvement—Livestock and Fishery	90,070	3·28
46—Agricultural Improvement—Forestry	9,150	0·33
47—Drainage and Irrigation	47,255	1·72
48—Storage	13,800	0·50
49—Others	353,935	12·87
Total ...	1,627,621	59·18
50—*Social Infrastructure*		
51—Primary Education	121,216	4·41
52—National Service	25,000	0·91
53—Housing	56,472	2·05
54—Health	88,255	3·21
55—Culture and Welfare...	10,952	0·40
56—Others	13,784	0·50
Total ...	315,679	11·48
60—*Administration and Security*		
61—Defence	104,953	3·82
62—Police	58,400	2·13
63—Prisons	7,223	0·26
64—Others	2,870	0·10
Total ...	173,446	6·31
70—Grand Total	2.750,000	100·00

EXPLANATORY NOTES ON ECONOMIC CLASSIFICATION OF DEVELOPMENT EXPENDITURE

The classification consists of six main categories each of which is further divided into several sub-heads. The categories and their sub-heads are described below:—

I. 10 *Directly Productive Activities.*

This category covers all directly productive investment in:

11 *Mining.*

12 *Manufacturing and Processing.*

All directly productive projects in manufacturing and processing, e.g. Vaccine Plant, Sawmills, Charcoal Production, Logging Units, Film Processing, etc.

13 *Agriculture—Food.*

This sub-head covers all projects producing food stuffs, e.g. Wheat State Farms, Rice State Farms, Vine growing, Multiplication and Breeding Centres.

14 *Agriculture—Commercial Crops.*

The type of projects included are, Oil Seed State Farms, Tobacco, Sisal, Tea growing, etc.

15 *Agriculture—Livestock and Fisheries.*

Includes projects like Fish Processing, Village Fishing Units, Dairy Farms, State Ranches, Pig Breeding Farms, Livestock Schemes, etc.

16 *Tourism.*

This sub-head covers all activities in tourism, e.g. Tourist Development of Game Areas, Tourist Roads and other Tourist Infrastructure, Hotels, Tourist Transport, etc.

17 *Others.*

This sub-head covers all other directly productive projects which do not belong to above sub-heads, i.e. Printing, Marketing, etc.

II. 20 *Research, Surveys and Investigations.*

All research, surveys and investigation projects from all sectors belong to this general category and are divided into the following three sub-heads:

21 *Agricultural and Allied Research.*

e.g. Banana Research, Forestry Research, Tsetse Control Research, Sorghum Research, Fisheries Research, Plant Pathology Laboratory, Nordic Research Station, etc.

22 *Other Research.*

All other research projects which do not belong to above sub-head (21) are covered by this sub-head, including Devplan Projects, Mapping, Mining Laboratory, Geological Mapping and Mineral Reconnaissance.

23 *Surveys and Investigations.*

This category covers all survey and investigation projects in agriculture, Water Supply, Geodetic Survey, Topographical Survey, Regional Survey Services, Roads Surveys and Investigations, etc.

III. 30 *Power, Water and Sanitary Services.*

31 *Electricity.*

All Power development projects belong to this sub-head, e.g. Rural Electrification and all TANESCO projects.

32 *Rural Water and Sanitary Services.*

Projects like Rural Water Supply Development, Expansion of W.D. and I.D. facilities and all sanitary services in rural areas belong to this sub-head.

33 *Urban Water and Sanitary Services.*

Urban Water Supplies, Lower Ruvu Scheme, Industrial Effluent Disposal, etc.

34 *Others.*

This sub-head covers "other" projects which cannot be strictly categorized in the above three sub-heads.

IV. 40 *Other Economic Infrastructure.*

The following examples indicate the type of projects which are classified under various sub-heads.

41 *Roads and Aerodromes.*

Construction of Roads, Aerodromes, Bridges, Airport Fire-stations, Equipment for construction of roads, etc.

42 *Communication and Broadcasting.*

Radio Tanzania, Satellite Stations, Transmitters, Monitoring Stations, Diplomatic Radios, Government Aircraft, and most of the East African Corporations' projects.

43 *Technical Education and Training.*

Secondary Schools, Technical and Commercial Schools, University Education, Training of Teachers, Training Institutions, and Centres of all sectors, Game Scout School, Co-operative College, Institute of Development Management, Secretarial College, Industries' Centre, etc.

44 *Agricultural Improvement—Crops.*

Development of New Crops, Extension Services, and Equipment, Agricultural Input Demonstration, Inspection Services, Land Consolidation, Advisory Services, Vermin Control, etc.

45 *Agricultural Improvement—Livestock and Fisheries.*

Dairy Extension, Livestock Development, Dips, Veterinary Centres, Quarantine Stations, Tsetse Control, Artificial Insemination, Sleeping Sickness Control, Fisheries Development, etc.

46. *Agricultural Improvement—Forestry.*

Catchment Forests, Forest services, Tree Nurseries, Forest Management, etc.

47 *Drainage and Irrigation.*

Irrigation Schemes, Smallholder Irrigation, etc.

48 *Storage.*

Government Stores, Depots, Silos, and all other investment in storage.

49 *Others.*

Other projects in Economic Infrastructure which cannot be strictly classified into the above sub-heads; Government Buildings, Regional and District offices, Parliament Building, Employment Service offices, Border Posts, State Lodges, Regional Development Fund, Nation Building projects, Self-Help Schemes, Tanzania Diplomatic Missions, Urban Economic Infrastructure, Site Clearance and Servicing, minor works, etc.

V. 50 *Social Infrastructure.*

51 *Primary Education.*

All Primary Schools.

52 *National Service projects.*

All National Service projects, excluding farms.

53 *Housing.*

All projects in Housing, e.g. Government Housing Programme, United Nations Housing, S.I.D.A. Housing, Institutional Housing in Health, Rural Housing Improvement. This category excludes Staff Quarters for Army, Police and Prisons.

54 *Health.*

Public Health Programme, Hospital Services, Ancillary and Special Services.

55 *Culture and Welfare.*

Regional Museums, Cultural Centres, Antiquities, National Stadium, etc.

56 *Others.*

Other projects in Social Infrastructure which are not covered by the above sub-heads, e.g. Community Centres, Public Libraries, etc.

VI. 60 *Administration and Security.*

This category covers all project in

61 *Defence.*

62 *Police.*

63 *Prisons.*

All projects except directly productive investment in agriculture.

64 *Others.*

Immigration, Justice and Judiciary Projects.

(*Note:* The classification is arbitray; made to give an over-all view of the pattern of investment).

(iii) PARASTATALS: INVESTMENT PROGRAMME (1969/74)

in '000 Shs.

	1969/70	1970/71	1971/72–1973/74	Total 1969/74
TANESCO	43,819	94,109	319,020	456,948
National Development Corporation ...	147,500	154,000	794,587	780,783
National Agriculture and Food Corporation				112,300
Tanzania Tourist Corporation				203,004
National Small-Scale Industries Corporation	622	3,568	2,342	6,532
State Trading Corporation	5,930	7,090	7,000	20,020
Tanzania Sisal Corporation	14,000	17,000	61,471	92,471
Lint and Seed Marketing Board	—	3,550	8,450	12,000
National Agricultural Products Board ...	5,436	13,638	5,926	25,000
Tanzania Tobacco Board	5,547	790	729	7,066
Tea Authority	12,450	8,920	67,150	88,520
National Dairy Board	7,800	500	700	9,000
National Milling Corporation	1,740	590	7,770	10,100
National Housing Corporation	27,500	28,000	222,500	278,000
National Parks	4,450	6,500	18,690	29,640
National Computer Corporation	—	2,000	2,000	4,000
Bank of Tanzania	1,110	2,405	1,055	4,570
National Insurance Corporation	5,180	5,320	4,500	15,000
National Bank of Commerce	4,000	4,000	18,000	26,000
National Co-operative Bank	360	120	800	1,280
National Development Credit Agency ...	400	400	824	1,624
Co-operatives	10,000	11,000	79,000	100,000
Others	1,000	1,000	2,000	4,000
Total ...	298,844	364,500	1,624,514	2,287,858
N.D.C.A. (medium and long term credit)	27,700	26,300	89,000	143,000
N.S.I.C.—net lending	601	700	2,373	3,674
Total ...	327,145	391,500	1,715,877	2,434,532

(iv) PARASTATALS: SCHEME OF FINANCE 1969/74 (Million Shs.)

	1969/70	Total
1. Own resources (including bank credit and domestic borrowings)	131 (39·7)	1,003 (41·2)
2. External sources	137 (41·5)	822 (33·8)
3. Government contribution	62 (18·70)	609 (25·0)
4. Total	330 (100)	2,434 (100)

(Figures in brackets are percentage shares).

(v) PARASTATAL INVESTMENT BY ECONOMIC CLASSIFICATION 1969/74

('000 Shillings)

Economic Classification	1969/70	% Share
(1) Mining	3,000	0·1
(2) Manufacturing and Processing	767,485	33·5
(3) Agriculture—Food	25,000	1·1
(4) Agriculture—Commercial Crops	273,400	11·9
(5) Agriculture—Livestock and Fisheries	9,000	0·4
(6) Tourism	232,629	10·2
(7) Agricultural and Allied Research	2,060	0·1
(8) Surveys and Investigations	336	—
(9) Electricity	456,948	20·0
(10) Storage	64,000	2·8
(11) Housing	348,000	15·2
(12) Others	106,000	4·6
Total ...	2,287,858	100·0

(vi) CAPITAL INVESTMENT (ALL SECTORS) BY ECONOMIC CLASSIFICATION (1969/74)

'000 Shs.

	Central Government	Parastatals	East African Corporations	Private Sector	Total	% Share
Directly Productive Activities	217,153	1,416,514	—	1,275,000*	2,908,667	37·51
Research, Surveys and Investigations	171,001	2,396	—	—	173,397	2·2
Power, Water and Sanitary Services	245,100	456,948	—	—	702,048	9·0
Other Economic Infrastructure	1,627,621	64,000	580,000	275,000	2,546,621	32·8
Social Infrastructure ...	315,679	348,000	—	600,000	1,263,679	16·3
Administration and Security	173,446	—	—	—	173,446	2·21
Total ...	2,750,000†	2,287,858	580,000	2,150,000	7,767,858	100·00

*Including Transport.
†Excludes Shs. 305 m. local cost of TANZAM Railway.

CHAPTER IV

THE PROGRAMME, PROJECT ALLOCATIONS AND SHORT DESCRIPTIONS

(i) PRESIDENT'S OFFICE

STATE HOUSE

State Lodges.

At present State Lodges exist at Arusha, Moshi, Lushoto, Mwanza, Tabora and Nachingwea. State Lodges will be built at regional headquarters in the Second Five-Year Plan. These lodges will vary in size according to requirements.

The programme is estimated to cost Shs. 7,937,000/- and is included under the Building Division of Comworks (Code 4916).

4901 *Purchase of Vehicles.*

To improve the existing situation in transport equipment, landrovers will be purchased for State Lodges and for the State House.

4902 *Radio Workshop.*

It is proposed to build and equip a small workshop where the radio engineer would be operating as he maintains the radio network at State House and maintains the radio sets in the Regions.

The above programme is phased as follows: —

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4901	Purchase of Motor Vehicles ...	22,000	48,000	88,000	158,000
4902	Radio Workshop	31,000	—	—	31,000
	Total	53,000	48,000	83,000	189,000

(ii) CENTRAL ESTABLISHMENT DIVISION

4301 *Institute of Development Management.*

In the training facilities provided by government, there is a serious shortfall in the provision of edequate functional training for middle and senior level management staff and secretarial services. Arising from this, there is a need for the establishment of the Institute of Development Management to train Tanzanians for senior and top-level managerial, administrative and accountancy positions in the Civil Service, Local Government Service and Parastatals and analogous organizations. This institute will be located at Mzumbe near Morogoro.

4302 *Secretarial College.*

The other institute which will be established during the Second Five-Year Plan is the Secretarial College. This college will provide training leading to full professional qualifications in Stenography, Typing and Administration. The Secretarial College will be located at Tabora.

The programme of the Division is phased as follows: —

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4301	Institute of Development Management, Mzumbe	3,000,000	3,000,000	10,000,000	16,000,000
4302	Secretarial College, Tabora	3,000,000	6,000,000	5,000,000	14,000,000
	Total	6,000,000	9,000,000	15,000,000	30,000,000

(iii) MINISTRY OF REGIONAL ADMINISTRATION AND RURAL DEVELOPMENT

The programme of the Ministry is aimed at technical and ideological development of rural areas. It is designed to help narrow the gap between urban and rural living and working conditions and in creating an adequate rural infrastructure to meet immediate local needs. The Ministry's programme is divided into 3 sections.

SECTION I—RURAL DEVELOPMENT DIVISION

The programme of the Rural Development Division concentrates on the creation of basic rural infrastructure, organization of rural people to solve their community problems and on helping peasants in their productive efforts.

4901 *Nation Building (Self-help) Schemes.*

A sum of Shs. 19,550,000/- has been allocated in the Second Five-Year Plan for this programme. Funds will be used in all Regions (Shs. 1,150,000/- each Region). The programme includes the provision of community facilities, e.g. primary schools buildings, rural dispensaries, feeder roads, bridges, centres, co-operative stores, etc. and the establishment of communal farms for domenstration and training. Special emphasis will be given to programmes for improvement of water supply and construction of low cost housing. In all cases, village communities will provide free labour and government are to provide technical and advisory services and assistance for materials.

4902 *Regional Development Fund.*

To supplement further the self-help effort of the rural communities, the Regional Development Fund has been established for allocation to Regional, District and Village projects. Shs. 125 million has been included in the Plan. Of this sum, Shs. 10 million will go to Zanzibar. Shs. 5 million will be kept in reserve for unforeseen expenditure and the rest will be divided equally among 17 Regions (Shs. 6·5 million each). The fund can be used only for productive projects and its use is aimed at meeting immediate local needs.

5601 *Community Centres.*

Four Urban Community Centres are planned for construction in Mafia, Mbozi, Mufindi and Nachingwea to serve the same function in urban areas that Rural Training Centres serve in rural areas, i.e. educational, cultural and recreational. The cost of establishing each new community centre is Shs. 300,000/-. These community centres would be self-supporting as far as recurrent costs are concerned.

5301 *Rural Housing Improvement.*

The Second Five-Year Plan puts a special emphasis on improvements in traditional building methods on self-help basis. It is planned to establish new Mobile Field Units and increase their number to 60 so as to provide at least one Unit for each district. The main function of these Units is to train local people in simple building techniques through self-help programmes, give guidance and advice on the maximum utilization of locally available materials. To realize this programme a provision of Shs. 17,000,000/- is made for the five years.

4303 *Rungemba Leadership Training Centre.*

Shs. 280,000/- will be used for alterations and additional buildings at the existing Rungemba Leadership Training Centre in 1969/70.

4304 *Kivukoni College.*

A sum of Shs. 2,029,395/- will be spent for expansion of facilities in the College so as to increase the intake of students.

4401 *Resettlement of Landless People.*

The project is designed to resettle 2,000 landless Wachagga families from Moshi. 500 families will be resettled in Mpanda to grow tobacco and the remainder in the Mwesi Highlands. In the first year, the settlers will receive limited assistance, including basic implements; thereafter they will be self-reliant. The estimated cost of the project is Shs. 622,000/-.

The Division's programme is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4901	Nation Building (Self-Help) Schemes	1,910,000	4,410,000	13,230,000	19,550,000
4902	Regional Development Fund ...	20,000,000	23,750,000	81,250,000	125,000,000
5601	Community Centres	—	600,000	600,000	1,200,000
5301	Rural Housing Improvement ...	400,000	2,400,000	14,200,000	17,000,000
4303	Rungemba Leadership Training Centre	280,000	—	—	280,000
4304	Kivukoni College	809,395	490,000	730,000	2,029,395
4305	Nordic Tanganyika Project, Kibaha	1,000,000	839,000	—	1,839,100
4401	Resettlement of Landless People	622,000	—	—	622,000
	Total—Rural Development Division	25,021,395	32,489,100	110,010,000	167,520,495

Section II—Local Government Division

During the Plan period Shs. 3,432,800/- is to be spent for the expansion of *Mzumbe Training Centre* in order to meet the envisaged increase of student intake. It is intended to accommodate approximately 300 additional students. The Centre provides training for both Rural Community Development and Local Government Staff.

The phasing of the Centre will be as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4305	Rural Training Centre, Mzumbe	500,000	1,100,000	1,832,800	3,432,800
	Total—Local Government ...	500,000	1,100,000	1,832,800	3,432,800

SECTION III—REGIONAL ADMINISTRATION DIVISION

The following projects of the Division are estimated to cost Shs. 9,426,200/- during the Plan period.

4903 *Grant to Local Authorities for Ward Offices.*

It has been decided to establish Divisional Wards, headed by Divisional Secretaries. Following the creation of the cadre of Divisional Secretaries it will be necessary to establish Divisional Headquarters. It is estimated that approximately Shs. 20,000/- will be required for the establishment of each Divisional Headquarter.

The programme will be implemented as follows:—

1970/71—102 Divisional Headquarters.
1971/72—110 Divisional Headquarters.
1972/73—134 Divisional Headquarters.

4401 *Resettlement—Rufiji.*

The total capital cost of this First Plan project is Shs. 739,000/- from which Shs. 500,000/- is to be carried forward to 1969/70 to complete the project.

4904 *Transport for Local Government.*

In view of the expansion of development activities in the Regions, existing transport facilities are found inadequate. A provision of Shs. 646,000/- for purchase of one truck for each Region at Shs. 38,000/- per truck is made in the Second Five-Year Plan. These trucks will transport materials and equipment to development sites in Regions to help in achieving targets in completing the projects and will minimise the need for hiring private transport.

4905 *Motor Cycles for Divisional Secretaries.*

For efficient and close supervision of local development schemes and co-ordination activities in Divisions, the Secretaries have to be provided with a motor cycle. A total number of 385 motor cycles will be purchased, 221 motor cycles in 1969/70 and 164 in 1970/71.

The programme of the Division is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4903	Grant to Local Authorities for Ward Offices	—	2,070,000	4,930,000	7,000,000
4401	Resettlement—Rufiji	500,000	—	—	500,000
4904	Transport for Local Government	646,000	—	—	646,000
4905	Purchase of Motor Cycles for Divisional Secretaries ...	784,400	495,800	—	1,280,200
	Total—Regional Administration Division	1,930,400	2,565,800	4,930,000	9,426,200
	Total—Ministry of Regional Administration and Rural Development	27,451,795	36,154,900	116,772,800	180,379,495

(iv) MINISTRY OF FOREIGN AFFAIRS

The Ministry intends to establish more diplomatic missions in order to facilitate contacts and ties with other nations. In the next five years, it is planned to open new missions in West Africa, Eastern Africa, Asia and Central Europe. It is also intended that Embassy/Chancery building and Ambassadors/High Commissioners' residences will be Tanzania Government's property rather than hired. To improve existing communication channels, Diplomatic Radios will be installed. In order to attract international conferences to Tanzania, it is intended to purchase conference interpretation equipment to cater for about 130 chief delegates sitting in a Conference Hall and for 4 Committees of 30 persons sitting at a time.

The investment programmes of the Ministry is phased as follows: —

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4901	Zambia Mission (Chancery) ...	900,000	—	—	900,000
4201	Conference Equipment	—	—	700,000	700,000
4202	Diplomatic Radios	200,000	—	—	200,000
4902	Guinea Mission...	—	500,000	500,000	1,000,000
4903	Japan Mission	—	2,000,000	—	2,000,000
4904	Central Europe Mission ...	—	—	2,000,000	2,000,000
4905	Purchase of Buildings ...	1,500,000	1,500,000	1,500,000	4,500,000
	Total ...	2,600,000	4,000,000	4,700,000	11,300,000

(v) SECOND VICE-PRESIDENT'S OFFICE

SECTION I—NATIONAL SERVICE

National Service expansion policy during the Plan period is described in facilities at the existing centres and on building new training schools, camps and objects of the policy. The programme mainly centres around expansion of facilities at the existing centres and on building new training schools, camps and centres. The major expenditure will be to provide permanent accommodation to students, as past experience with tent accommodation has, in the long run, proved expensive. More vehicles for the force are important. The large number of young men and women, entering the National Service and the location of the schools and centres make adequate transport necessary to facilitate mobility of the force. The third item of expenditure is military equipment, including arms and ammunition, which are required to provide the youths with basic military training and practice.

During the first Plan, National Service successfully undertook a number of agricultural projects. These were designed as nation-building schemes, but were found invaluable in making the National Service Force self-reliant in food stuffs. An important impact of these schemes is the opportunity given to the youth for learning modern farming methods.

The next five years will see an increased emphasis on agricultural programmes. About Shs. 3,000,000/- will be spent on agricultural projects, for extending existing facilities as well as for opening new farms.

It is also intended to provide the youths with training in simple handicraft work such as carpentry, masonry, blacksmithry, plumbing, and tailoring.

The National Service expansion programme has been phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5201	National Service Headquarters	1,276,000	1,219,850	3,130,000	5,625,850
5202	Central Training School, Mgulani	980,500	360,000	840,500	2,181,000
5203	Training Centre, Ruvu	621,000	1,722,400	441,600	2,785,000
5204	Training Centre, Mafinga ...	745,800	842,000	747,500	1,975,300
5205	*New Training Centres:* Oljoro, Makutopora and Tabora	1,527,600	1,870,000	1,187,600	4,585,200
5207	N.S. Regional Centres	1,706,900	1,530,000	1,775,500	5,012,400
5208	New Regional Camps (10) ...	—	2,835,440	—	2,835,440
	Total—National Service ...	6,857,800	10,019,690	8,122,700	25,000,190

SECTION II—DEFENCE AND OTHER CONTINGENCIES

Defence and other contingencies will cost about Shs. 105 million during the Plan period.

SECTION III—NATIONAL ARCHIVES

The following projects for the Archives have been included under Comworks.

National Archives Building.

The present archives storage area is unsuitable. Lack of air-conditioning, and poor storage facilities result in fast deterioration of records. Furthermore, present facilities are scattered throughout Dar es Salaam. This situation is unsatisfactory. Lack of proper accommodation has also prevented the use of microfilming, photo copying, shredding and preservation equipment. A new building costing Shs. 1·4 million is therefore planned. (Code No. 4914).

Records Management Centre.

It is intended to provide an administrative common service, a logical extension to Government Registries, and a step towards the development of the National Archives Services.

The Central will alleviate the present clogging of Government offices with records in the hands of junior Registry staff. Besides achieving benefits of centralized control of old records for storing closed files, it will effect economies in space, in filing equipment and Registries' operations. Individual Ministries' registries will not then have to maintain their own closed files' stores. The Centre will cost Shs. 560,000/-. (Code No. 4201).

SECTION IV—PRINTING DIVISION

The increasing volume of work handled by Government Press necessitates expansion of printing facilities. New machinery costing about Shs. 392,000/- will be installed during the Plan period.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1972/73	Total Estimated Expenditure 1969/70–1973/74
1701	Printing Machinery	171,000	162,000	59,000	392,000
	Total ...	171,000	162,000	59,000	392,000

SECTION V—JUDICIARY

The development programme of this Department involves capital expenditure amounting to Shs. 5,870,000/-. It is intended during the five-year period to build 19 New Courts and 12 Court Extensions. It is also planned to purchase 35 Landrovers and establish Verbatim Reporting System Equipment for recording High Court proceedings.

New Court Buildings.

One of the new courts will be built at Dar es Salaam to replace the old Senior Resident Magistrate's Court. It will cost Shs. 2,300,000/- and will be built over a period of three years. The building will consist of 3 large Criminal Courts, 2 Civil Courts and five Resident Magistrates' Chambers.

The plan also allocates Shs. 1,800,000/- for new District Courts of medium standard at Mbinga, Singida, Iringa, Maswa, Kigoma, Newala, Kibondo, Rufiji, Mpwapwa, Dodoma, Mbeya, Bukoba, Babati and Muheza. They are intended to accommodate Magistrates who are at present inadequately accommodated in Regional Administration Offices and District Council Buildings.

A sum of Shs. 280,000/- has also been allocated during the five-year period for building 4 Primary Courts at Bagamoyo, Dar es Salaam (Ilala), Arusha and Tanga. In addition, the Department intends to build more Primary Courts in the rural areas through self-help schemes.

Court Extensions.

In order to provide sufficient office accommodation for the Magistrates and their supporting staff, provision has been made during the five years to build 11 extensions to the existing Court buildings at Nzega, Lindi, Kasulu, Shinyanga, Geita, Sumbawanga, Manyoni, Songea, Ukerewe, Mtwara and High Court Mwanza. The total cost of the extensions is Shs. 420,000/- which will be spread over the five years. The extensions will include offices, exhibit and stationery stores and adequate sanitary facilities.

The estimated expenditure for Court buildings and extensions is 4·8 million shillings and is included under Comworks. (Code No. 6403).

6401 *Transport Equipment.*

The Department intends to purchase 35 Landrovers over the period of the Plan. These vehicles will be used in Districts for effective supervision of Primary Courts and collection of Judiciary revenue. The total cost of this project amounts to Shs. 770,000/-.

6402 *High Court Verbatim Reporting System Equipment.*

The aim of this Department is to speed up justice, to achieve which, a new system of recording High Court proceedings by using a tape recording equipment has been envisaged, this being cheaper than the present one. The total cost of this project will amount to Shs. 300,000/-. It is intended to install the equipment at Dar es Salaam, Mwanza, Arusha and Tanga High Courts during the first 4 years of the Plan.

SECOND VICE-PRESIDENT'S OFFICE (JUDICIARY)

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72-1973/74	Total Estimated Expenditure 1969/70-1973/74
6401	Purchase of Vehicles	150,000	150,000	470,000	770,000
6402	High Court Reporting Equipment	140,000	100,000	60,000	300,000
	Total—Judiciary	290,000	250,000	530,000	1,070,000

(vi) MINISTRY OF AGRICULTURE, FOOD AND CO-OPERATIVES

As described in Volume I of the Second Five-Year Plan, rural development is the key to the achievement of the production targets in the Plan as well as to the social goal of spreading development to the mass of the people. The programme of the Ministry of Agriculture Food and Co-operatives therefore plays an exceedingly important role. The Ministry is directly responsible for a wide range of functions; agricultural advisory and technical services, agricultural training and farmer's education, irrigation and rural water development, research, production activities, price and marketing policy, planning and basic agricultural improvement of various agricultural and allied activities.

A.—The Ministerial Programme falls into seven Divisions:

SECTION I—AGRICULTURE AND FOOD DIVISION

The Agriculture and Food Division is basically concerned with agricultural and livestock extension services, animal disease control and livestock marketing. Extension work is aimed at increasing the productivity of land and people in the context of "Ujamaa Vijijini".

The Division plans to implement the following projects during the Second Plan. The total cost of the programme is estimated at Shs. 99·4 million.

4501 *Dairy Cattle Importation.*

It is intended to improt pure-breed Jersey and Guersey breeding cattle for multiplication on Veterinary Division farms and for sale to farmers. This is estimated to cost Shs. 496,400/-.

4502–7 *Livestock Multiplication Units, Iringa, Mbeya, Sukumaland, Mivumoni, Kitere and Rungwand.*

The units will produce breeding stock for distribution to local farmers to upgrade their cattle. The six units will cost Shs. 10,412,700/-.

2125 *Poultry Performance and Testing Centre, Mara.*

The Centre's activities aim at determining the feed conversion capacity of different varieties of poultry for eggs and meat, according to the conditions prevailing in different parts of Tanzania.

It will also study the value of various feeds locally obtainable and make available cheap but efficient food mixtures. The project is estimated to cost Shs. 50,000/-.

4901 *Mobile Building Units.*

In order to reduce costs of small-scale "institutional" building, primarily in remote areas, it is intended to form 2 mobile building teams. Total capital cost is Shs. 409,000/-.

4401 *Land Consolidation, Mara.*

It is planned to study ways and means of consolidating and improving peasant land held on an individual basic into a more viable land use system. Total cost is Shs. 50,000/-.

4402 *Extension Equipment.*

Kilimo extension staff will be provided with simple equipment for demonstration purposes. This is estimated to cost Shs. 500,000/-.

4403 *Agricultural Input Demonstrations.*

This is a FAO assisted project to demonstrate the use of fertilizers to groups of farmers. Government is to meet part of the cost, e.g. the supply of seeds, and FAO will supply fertilizers. Government contribution to this project is Shs. 2,775,000/-.

4404 *Horticulture.*

It is intended to establish five horticultural stations where seed production, research, practical demonstration and training will be carried on to encourage the production of selected fruit and vegetables in accordance with national and regional priorities. These five stations will cost Shs. 1 million.

4405 *Vermin Control.*

During the Second Plan period, it is planned to establish and equip eight new units. The project will also demonstrate to the farmers simple methods of vermin control. (In some areas vermin are responsible for crop losses in the region of 25 per cent). The estimated cost is Shs. 1,645,000/-.

4406 *Produce Inspection Service.*

The project aims at inspection of imports and exports of all agricultural produce for pests as well as inspection of all types of storage premises throughout the country, and will render advice on pest control in stored products. It is planned to construct offices at all points of entry and at all regional centres and provide adequate equipment and in-service training of Agricultural staff. The total cost is estimated at Shs. 582,300/-.

4508 *Regional Poultry Distribution Centres.*

It is intended to establish testing and distribution centres in each region for distribution of improved 12-week old stock to local producers who lack facilities to rear their own day-old chicks. The project will cost Shs. 255,000/-.

4509 *Small-holder Dairy Extension.*

The project will provide housing and equipment for a field force of dairy extension workers who will be placed in areas of high dairy-development potential. The estimated cost is Shs. 1,469,800/-.

4510 *Grazing Research and Survey.*

It is planned to investigate local grazing problems which limit production and to carry out limited basic research in grazing control. The project will also involve surveys of grass and bush cover in Range Development Areas to provide base data for planning of Ranching Associations. The total cost is Shs. 880,000/-.

4511 *Range Development.*

It is planned to set up 2 Ranching Associations annually in each of seven areas, i.e. 70 in all during the five years of the Plan. The total plan provision is Shs. 20 million.

4512 *U.N. Livestock Project.*

The project is aimed at encouraging the formation of Ranching Associations under the Range Act, including inter-disciplinary investigation of local conditions relevant to their successful establishment. This project will require government funds of about Shs. 5,869,000/-.

4513 *Cattle Dips.*

Provision for up to 500 cattle dips and 500 spray-races to reduce the incidence of East Coast Fever, has been made during the Second Plan. The programme when completed will have covered the whole country. The dips will cost Shs. 12,086,900/-.

4514 *Dips for Sheep and Goats.*

Provision is made for 60 new dips over the Five-Year Plan at a total cost of Shs. 400,000/-.

4515 *Rinderpest Control.*

It is a part of J.P. 15 of O.A.U. Joint Campaign against rinderpest. Tanzania will receive practical backing in the form of materials and services to finally rid the country of the disease. This is estimated to cost Shs. 269,000/-.

4516 *Permanent Inoculation Crushes.*

Locally constructed cattle crushes for inoculations against cattle disease, particularly rinderpest are planned in various areas at a total cost of Shs. 1,418,000/-.

4517 *Veterinary Centres.*

These centres, of which 15 will be constructed over the Plan period, will provide veterinary services to farmers in remote areas. They will also serve as local headquarters for the A.I. service which is being developed as another plan project. The centres will cost Shs. 558,000/-

4518 *Veterinary Clinic, Dar es Salaam.*

It is planned to provide a new building for the Veterinary Clinic in Dar es Salaam, currently housed in an old and unsuitable building. The capital cost is Shs. 50,000/-.

4519 *Veterinary Equipment.*

It is intended to import some veterinary equipment under the available U.S.S.R. credit of Shs. 600,000/- during the Plan period.

4520 *Veterinary Vehicles.*

A provision of Shs. 1,190,500/- is made for vehicles for increasing the mobility of Veterinary staff.

4521 *Dar es Salaam Quarantine Station.*

An approved holding ground to quarantine cattle, prior to export as fresh meat, or on the hoof is planned. It involves double-fencing of an area about 10 square miles and construction of staff and cattle housing. The total cost is Shs. 687,700/-.

4522 *Veterinary Bush Clearing Unit.*

It is intended to provide the Veterinary Division with a completely self-sufficient heavy bush clearing unit capable of clearing over 200 acres per day. This is estimated to cost Shs. 2,727,300/-.

4523 *Tsetse Control—Kitengule.*

The project is aimed at tsetse clearing to allow the development of NAFCO beef ranching in Kitengule. The total cost is Shs. 1,218,000/-.

4524 *Sleeping Sickness, Arusha.*

The project is aimed at eradication of sleeping sickness in the Arusha Region to increase the rate of utilization of affected land. The project will cost Shs. 420,000/-.

4525 *Tsetse Control, Range Development Areas.*

To eliminate tsetse in areas to be developed under the Range Management Act, Shs. 3 million will be spent during the Second Five-Year Plan.

4526 *Tsetse Control, Nachingwea.*

It is intended to eliminate tsetse in this area where cattle are being introduced as part of the policy to increase livestock production in the southern half of the country. The Project is estimated to cost Shs. 1,118,000/-.

1701 *Livestock Markets.*

The project provides for the construction, improvement and administration of livestock markets hitherto operated by District Councils, in order to increase their efficiency and the number of livestock marketed. The estimated cost is Shs. 4,786,200/-.

4527 *Stock Routes and Holding Grounds.*

This will facilitate the transit of stock both for slaughter or for distribution to other areas for finishing off, breeding, etc. The project will cost Shs. 14,676,000/-.

4302 *Hides and Skins Training Centres.*

The project will provide a small centre for the intensive training of personnel in the handling and dressing of hides and skins. The centre's estimated cost is Shs. 140,000/-.

4528 *Hides Demonstration Unit.*

A demonstration unit will be set up to improve the quality and utilization of marketed hides in addition to being used for other Veterinary Division extension work. The cost of the unit is estimated at Shs. 196,000/-.

4529 *Abattoirs.*

It is planned to establish 5 abattoirs each with a daily capacity of 100 cattle plus sheep and goats to supply local markets. The total cost of these abattoirs is Shs. 3,300,000/-.

4530 *Artificial Insemination.*

This includes the extension of the central facilities at Mpwapwa, the construction of District H.Q.s and village centres for the distribution of semen to high-potential dairy areas. The total cost is Shs. 2,187,400/-.

4531 *Urban Milk Centres.*

The centres will provide facilities for pasteurising, blending, cooling and marketing milk in up to fifteen urban centres not provided with suitable facilities but around which there is scope for developing small-scale milk production to serve the local markets. The centres are estimated to cost Shs. 2 million.

The programme of the Division is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4501	Dairy Cattle Importation	—	—	496,400	496,400
4502	Livestock Mult. Unit, Iringa	300,000	300,000	273,800	873,800
4503	Livestock Mult. Unit, Mbeya	200,000	100,000	215,400	515,400
4504	Livestock Mult. Unit, Sukumaland	1,750,000	300,000	473,500	2,523,500
4505	Livestock Mult. Unit, Mivumoni	—	700,000	2,300,000	3,000,000
4506	Livestock Mult. Unit, Kitere	—	620,000	1,380,000	2,000,000
4507	Livestock Mult. Unit, Rungwani	—	500,000	1,000,000	1,500,000
2125	Poultry Performance Testing Centre	—	50,000	—	50,000
4401	Land Consolidation, Mara	50,000	—	—	50,000
4901	Mobile Building Units	—	204,500	204,500	409,000
4402	Extension Equipment	—	100,000	400,000	500,000
4403	Agricultural Input Demonstration	100,000	300,000	2,375,000	2,775,000
4404	Horticulture	150,000	150,000	700,000	1,000,000
4405	Vermin Control	200,000	308,000	1,137,000	1,645,000
4406	Produce Inspection Service	100,000	124,300	358,000	582,300
4508	Regional Poultry Distribution Centre	—	165,000	90,000	255,000
4509	Smallholder Dairy Extension	—	200,000	1,269,800	1,469,800
4510	Grazing Survey and Evaluation	150,000	140,000	590,000	880,000
4511	Range Development	800,000	986,000	18,214,000	20,000 000
4512	Livestock Development	2,042,800	1,904,900	1,921,300	5,869,000
4513	Cattle Dips	1,500,000	1,500,000	9,086,900	12,086,900
4514	Dips for Sheep and Goats	100,000	100,000	200,000	400,000
4515	Rinderpest Control	118,000	115,000	36,000	269,000
4516	Permanent Inoculation Crushes	250,000	114,000	1,054,000	1,418,000
4517	Veterinary Centres	50,000	50,000	458,000	558,000
4518	Veterinary Clinic, Dar es Salaam	—	—	50,000	50,000
4519	Veterinary Equipment	60,000	120,000	420,000	600,000
4520	Veterinary Vehicles	—	150,000	1,040,000	1,190,500
4521	Quarantine Station, Dar es Salaam	—	100,000	587,700	687,700
4522	Veterinary Bush Clearing Unit	—	1,858,300	869,000	2,727,300
4523	Tsetse Control, Kitengule	450,000	210,000	558,000	1,218,000
4524	Sleeping Sickness, Arusha Reg.	190,000	136,000	93,300	420,000
4525	Tsetse Control, Range Development Areas	150,000	150,000	2,700,000	3,000,000
4526	Tsetse Control, Nachingwea	—	—	1,118,000	1,118,000
1701	Livestock Markets	1,000,000	1,500,000	2,286,200	4,786,200
4527	Stock Routes and Holding Grounds	3,010,750	3,353,100	8,312,150	14,676,000
4302	Hides and Skins Training Centre	—	—	140,000	140,000
4528	Hides and Skins Demonstration Unit	—	—	196,000	196,000
4529	Abattoirs	300,000	600,000	2,400,000	3,300,000
4530	Artificial Insemination	400,000	283,200	1,504,200	2,187,400
4531	Urban Milk Centres	250,000	150,000	1,600,000	2,000,000
	Total—Agriculture and Food Division	13,671,550	17,643,000	68,108,750	99,423,300

SECTION II—PRODUCTION DIVISION

The primary function of this Division is to develop State Farms and and Ranches under direct control of the Ministry. The State Farms will also act as nuclei of development with areas of traditional farming surrounding them, and acting as service centres for satellite Ujamaa Villages. The programme includes projects for proving specific technical services, e.g. in regards to mechanization, pest control, etc. State Farms have been costed on "trading account basis" i.e. initial capital will be provided through budgetary allocation and once the farms start producing, further investment will be met from that income.

The following projects costing Shs. 100·4 million are planned for this Division: —

1501 *Breeding Centre for Dairy Cattle, West Lake.*

This will be a 30,000 acre ranch, to carry 2,000 cows (local *zebus*) which will be crossed with exotic dairy bulls. The half bred progeny will be marketed locally to raise milk output. The project is estimated at Shs. 5,284,000/-.

1502 *Dairy Cattle Breeding Centre and Milk Production Plan, Kitulo.*

A new project immediately adjacent to the existing UNDP project (1506), involves eventually 10,000 breeding stock on some 50,000 acres. The centre is aimed at introducing and up-grading *Zebu* stock and acting as a multiplication centre to serve a wide area. Cross-bred heifers will be sold to small-holders dairy groups and production of milk will be undertaken at the centre. Total cost is estimated at Shs. 5,181,100/-.

1503 *Breedng Centre for Dairy and Beef Cattle, Esseningor.*

The centre will provide up-graded dairy and beef breeding stock for sale to farmers. It will cost Shs. 8,913,500/-.

1504 *State Dairy Farm, Oljoro.*

The farm will produce milk for Arusha Dairy plant as well as demonstrate dairy husbandry and sell arable crops and some surplus dairy heifers. The farm is estimated to cost Shs. 985,000/-.

1505 *State Dairy arm, North Mara.*

The farm will produce milk for Utegi milk plant and produce up-graded breeding stock for sale to local farmers. It is estimated to cost Shs. 971,900/-.

1506 *U.N.D.P. Livestock Scheme, Kitulo.*

This is a continuation of the existing sheep and wheat project to bring the sheep numbers up from the existing 25,000 to 40,000 and to continue investigations into arable and pasture production. In adition a modification to the project is aimed at in order to introduce cattle into the grazing regime so that eventually both sheep and cattle can be made available to local farmers in the vicinity, together with appropriate technical services, in accordance with optimum pasture utilization.

1507–8 *State Ranches—Uvinza and Singida.*

It is planned to produce high quality beef. The Ranches will also act as a source of good bulls for local distribution. The estimated cost is Shs. 1,649,700/- each.

1509 *Beef Ranching Scheme, Handeni.*

The project will increase domestic beef supply by establishing 20 small ranches which will eventually be run on co-operative lines. The scheme is estimated to cost Shs. 3,532,000/-.

1510 *Pig Breeding Farm.*

The farm will produce weaners for sale to small holders for fattening and breeding purposes. Provision is also made for mixing facilities for small holders to demonstrate good pig husbandry. The estimated cost is placed at Shs. 130,000/-.

1511 *State Ranch, Goats.*

The Ranch will provide goats for sale as meat in Dar es Salaam. Total cost is estimated at Shs. 949,000/-.

1401 *Oil Seed State Farm.*

This is a mixed farm which will include the growing of soya beans and maize. In addition there will be some cattle raising. The total area will be 20,000 acres with 4,000 acres under crops at any time. It is estimated to cost Shs. 1,564,000/-.

1402 *Oil Palm State Farm, Kigoma.*

There will be direct production of oil palm on 5,000 acres. Satellite small holdings will be encouraged in the vicinity with central services provided by the State Farm. Total cost is estimated at Shs. 5,004,800/-.

1301 *Vine-growing, Dodoma.*

Direct production of grapes is planned. Service to the surrounding small holder will also be provided. Total estimated cost is Shs. 1,604,600/-.

1302 *Wheat State Farm, Sumbawanga I.*

It is planned to produce wheat and provide a base for wheat extension, seed multiplication and distribution. Total cost is Shs. 2,941,800/-.

1303–4 *Wheat State Farms: Ilembo and Syutila (Mbeya).*

A 2,000 acre farm for the production of wheat is planned both at Ilembo and Syutila (Mbeya). Each farm will cost Shs. 1,039,400/-.

1305 *Wheat State Farm—Kipengere (Njombe).*

In addition to the production of wheat the farm will act as a centre for wheat extension, seed multiplication and distribution. It is estimated to cost Shs. 3,320,000/-.

1306 *Wheat State Farm—Mara.*

Production of Wheat on 1,000 acres is planned. Shs. 672,400/- is estimated to be spent.

1307 *Rice State Farm, West Lake.*

The State Farm will grow rice on 250 acres and an additional 250 acres will be for outgrowers who will be provided with central services. The total cost is Shs. 634,200/-.

1308–10 *Rice State Farms, Kigoma, Lukuledi (Mtwara) and Kilingali (Kilosa).*

1,000 acre rice state farms will be established at Kigoma, Lukuledi and Kilingali with an additional 1,000 acres reserved for small holders who will be served centrally. Estimated cost is Shs. 1,436,500/- for each farm.

1311–12 *Coconut State Farms, Zegereni (Bagamoyo) and Lindi.*

It is planned to establish 4,000 acre coconut plantations with 2,000 acres for outgrowers at Zegereni and Lindi. Cattle will be introduced when the palms are old enough. Estimated cost is Shs. 5,106,100/- for each.

1313–14 *State Farms, Milundikiwa and Rwamkoma.*

These continuing wheat projects are designed to provide nuclei for satellite settlement schemes, involving participation of local farmers with provision for managerial, advisory services, agricultural machinery and improved seeds; demonstration in the use of improved techniques, etc. The estimated cost is Shs. 4,102,900/- and Shs. 4,248,200/- respectively.

1403–1418 *Tabacco Schemes.*

These include 15 schemes for the production of flue-cured tobacco on the basis of ujamaa co-operatives. On 11 of these schemes settlers will be directly provided with inputs in the first year. On the remaning 4 schemes, settlers will obtain credit for these items. The total cost of the 15 schemes is Shs. 7,044,700/-.

1315 *State Farm, Wheat, Sumbawanga II.*

The state farm is designed to develop the agriculture of the area by introducing a cash crop and removing some of the production and marketing bottlenecks for the farmers in the satellite settlement schemes. It is estimated to cost Shs. 4,234,000/-.

1316–1317 *State Farms, Wheat, Sumbawanga III and Buha Highlands.*

The farms will produce wheat and provide a base for wheat extension, seed multiplication and distribution. The cost is estimated at Shs. 4,234,000/- each.

1512 *State Farm and Dairy, Arusha.*

This Dairy State Farm with some 1,400 high grade dairy cattle by the fifth year will supply the milk Processing Plant in Arusha so as to replace imports of milk. The project will cost Shs. 3,839,800/-.

1513 *State Farm and Dairy, Morogoro.*

This Dairy State Farm with some 1,400 high grade dairy cattle by the fifth year; will be sited on an abandoned sisal estate and produce milk for the Dar es Salaam market. The cost is estimated at Shs. 3,744,800/-.

1318–1323 *State Farms, Dodoma I, II, III, Tabora and Buha Highlands I, II.*

These are mixed farms; beef animals will be supplied to utilize the surplus capacity of the Tanganyika Packers' Canning Plant, as well as to satisfy local demand. In addition these farms will provide services and serve as sources of improved stock to farmers in satellite villages. The total cost of these farms is estimated at Shs. 12,306,300/-.

4705 *Irrigation, Usangu Plain.*

The project is aimed at improving channelization and the organization of water use in an area where there is considerable potential for low cost irrigation production. The cost is estimated at Shs. 100,000/-.

4706 *Small-holder Irrigation.*

This project includes a programme to train 40 field staff who will advise local farmers:—

(i) to recognize opportunities from irrigation;
(ii) to use simple and cheap methods of irrigation.

Provision is also made for facilities to ensure proper water use. The programme is estimated to cost Shs. 4,084,500/-.

4408 *Mechanical Advisory Service.*

It is planned to develop mechanical skills in small farmers and groups so as to make more efficient use of appropriate machinery and reduce premature replacements and expenditure on spare parts for tractors and other equipment. The Project estimated to cost Shs. 941,100/-.

4315 *Ox-training and Demonstration.*

The project is designed to train oxen as well as farmers so as to encourage the efficient use of ox-drawn equipment. It is estimated to cost Shs. 2,746,400/-.

4409 *Production and Distribution of Seeds.*

The project is aimed at:—

(i) multiplication and distribution of improved seeds to farmers;
(ii) providing seed cleaning and packing facilities.

The total expenditure is estimated at Shs. 2,605,100/-.

4410 *Bird Control.*

It is intended to establish a sub-unit in Dodoma to improve the coverage and overall efficiency of bird control. The cost of the unit is estimated at Shs. 792,400/-.

1520 *Poultry Multiplication Centre (Ukonga).*

The project is designed to provide hatchery facilities for 2 breeding stations and to ensure a steady supply of day—old chicks at reasonable prices while replacing imports. The Centre will cost Shs. 300,000/-.

1521 *Poultry Breeding Centre, Kibaha.*

Provision is made for a 2nd breeding station as an insurance against disease in any one station. The estimated cost of the centre is Shs. 245,000/-.

4411 *Soil Conservation.*

It is intended to construct soil conservation units in Sukumaland where soil erosion presents a serious threat so as to ensure the continued production of cotton. The cost is estimated at Shs. 2,194,000/-.

4412 *Farm Planning.*

The project is designed to provide farm planning facilities to undertake the micro-planning of agricultural and livestock production projects in the context of national, regional and district crop priorities and of sound land use policy generally. A total of Shs. 2,663,000/- is estimated to be spent during the Plan period.

1516 *Cattle Production Breeding Farm—Tunduru.*

The farm will supply improved dairy cattle to smallholders and groups of farmers, so as to increase milk production, and will cost Shs. 5,793,800/-.

The programme of the Division is phased as follows: —

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
1501	Breeding Centres for Dairy Cattle, West Lake	—	—	5,284,000	5,284,000
1502	Breeding Centres for Dairy Cattle, Kitulo	1,000,000	1,240,000	2,941,100	5,181,100
1503	Breeding Centres for Dairy Cattle, Essimingor	1,189,300	1,123,100	6,601,100	8,913,500
1504	State Dairy Farm, Oljoro ...	985,000	—	—	985,000
1505	State Dairy Farm, Mara ...	352,400	312,300	307,200	971,900
1506	Livestock Scheme, Kitulo ...	345,000	220,000	875,000	1,440,000
1507	State Ranch, Uvinza	417,700	510,000	722,000	1,649,700
1508	State Ranch, Singida	—	—	1,649,700	1,649,700
1509	Beef Ranching Scheme, Handeni	—	—	3,532,000	3,532,000
1510	Pig Breeding Farms	130,000	—	—	130,000
1511	State Ranch, Goats	—	—	949,000	949,000
1401	Oil Seed State Farm, Kigoma...	—	1,071,000	493,000	1,564,000
1462	Oil Palm State Farm	750,300	1,110,100	3,144,400	5,004,800
1301	Vine Growing, Dodoma ...	600,000	447,700	556,900	1,604,600
1302	Wheat State Farm, Sumbawanga	666,000	260,800	2,015,000	2,941,800
1303	Wheat State Farm, Ilembo ...	—	666,000	373,400	1,039,400
1304	Wheat State Farm, Syutilya ...	—	—	1,039,400	1,039,400
1305	Wheat State Farm, Njombe ...	666,000	666,000	1,988,000	3,320,000
1306	Wheat State Farm, Mara ...	—	570,000	102,400	672,400
1307	Rice State Farm, West Lake ...	—	400,000	234,200	634,200
1308	Rice State Farm, Kigoma ...	—	1,107,500	329,000	1,436,500
1309	Rice State Farm, Lukuledi ...	—	—	1,436,500	1,436,500
1310	Rice State Farm, Kilingali ...	800,000	329,000	307,500	1,436,500
1311	Coconut State Farm, Zegereni...	550,000	930,900	3,625,200	5,106,100
1312	Coconut State Farm, Lindi ...	—	—	5,106,100	5,106,100
1313	State Farm, Milundikwa ...	284,250	255,550	3,563,100	4,102,900
1314	State Farm, Rwamkoma ...	47,000	20,000	4,181,200	4,248,200
1403	Ulyankulu Tobacco Settlement Scheme, Tabora	65,000	65,000	124,000	254,000
1404	Matwiga Tobacco Settlement Scheme, Chunya	—	—	155,000	155,000
1405	Lupatingatinga Tobacco Settlement Scheme, Chunya ...	—	—	155,000	155,000
1406	Kaliua Tobacco Settlement Scheme, Tabora	115,000	70,000	220,000	405,000
1407	Usoke Tobacco Settlement Scheme, Tabora	50,000	—	155,000	205,000
1408	Uyowa Tobacco Settlement Scheme, Tabora	65,000	65,000	124,000	254,000
1409	Kiyanga and Igalula Settlement Scheme, Tabora	92,000	90,000	155,000	337,000
1410	Urambo Tobacco Settlement Scheme, Tabora	68,000	—	155,000	223,000
1411	Lualaje Tobacco Settlement Scheme, Chunya	92,000	70,000	220,000	382,000
1412	Mpanda Tobacco Settlement Scheme, Mpanda	9,500	18,500	74,000	102,000
1413	Karume Tobacco Settlement Scheme, Iringa	49,000	21,000	68,000	138,000
1414	Malyeka Tobacco Settlement Scheme, Chunya	11,000	8,000	21,000	40,000
1415	Tunduru Tobacco Settlement Scheme, Tunduru	31,000	8,000	21,000	60,000
1416	B.A.T. Schemes—Tabora ...	214,000	23,000	93,000	330,000
1417	Kiwere Tobacco Settlement Scheme, Iringa	20,000	—	—	20,000
1418	Stores Orders	3,984,700	—	—	3,984,700

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
1315	State Farm, Wheat, Sumbawanga II	—	604,400	3,629,600	4,234,000
1316	State Farm, Wheat, Sumbawanga III	—	—	4,234,000	4,234,000
1317	State Farm, Wheat, Buha Highlands	—	887,500	3,346,500	4,234,000
1512	State Farm, Dairy, Arusha II ...	—	—	3,839,800	3,839,800
1513	State Farm, Dairy, Morogoro ...	—	735,100	3,009,700	3,744,800
1318	State Farm, Mixed, Dodoma I...	—	—	2,244,800	2,244,800
1319	State Farm, Mixed Dodoma II	—	—	2,012,300	2,012,300
1320	State Farm, Mixed, Dodoma III	—	—	2,012,300	2,012,300
1321	State Farm, Mixed, Tabora ...	—	—	2,012,300	2,012,300
1322	State Farm, Mixed, Buha Highlands I...	—	—	2,012,300	2,012,300
1323	State Farm, Mixed, Buha Highlands II	—	—	2,012,300	2,012,300
4705	Irrigation, Usangu Plain ...	—	—	100,000	100,000
4706	Smallholder Irrigation	471,600	506,500	3,106,400	4,084,500
4408	Mechanical Advisory Service ...	185,400	98,300	657,400	941,100
4315	Ox Training, Demonstration ...	415,500	415,500	1,915,400	2,746,400
4409	Production and Distribution of Seeds	787,600	823,800	993,700	2,605,100
4410	Bird Control	460,000	332,400	—	792,400
1520	Poultry Multiplication Centre...	300,000	—	—	300,000
1521	Poultry Breeding Centre, Kibaha	245,000	—	—	245,000
4411	Soil Conservation	—	—	2,194,000	2,194,000
4412	Farm Planning	317,000	372,100	1,973,900	2,663,000
1516	Cattle Production—Breeding Farm, Tunduru	—	—	5,793,800	5,793,800
	Total—Production Division ...	16,831,250	16,454,050	100,196,900	133,482,200
	Less Anticipated Income (Trading a/c)	—	2,538,950	30,553,250	33,092,200
	Total—Government Funds Required	16,831,250	13,915,100	69,643,650	100,390,000

SECTION III—RESEARCH AND TRAINING DIVISION

During the Second Five-Year Plan, fundamental changes are planned in the organization of rural training. Farmer's education organized in Farmer's Training Centres will be combined during the Plan with District Training Centres, previously run by Maendeleo. into multi-purpose Rural Training Centres. This will reduce costs and co-ordinate various training activities. The research programme is aimed at improving production techniques in agriculture and allied areas. The programme during the plan period is estimated to cost Shs. 109·5 million.

1201 *Vaccine Production Plant.*

The project is designated to produce Foot and Mouth and Poultry disease Vaccines and to conduct research into East Coast Fever, Trypanosomiasis and other diseases. The total amount to be spent during the 2nd Plan is estimated at Shs. 10 million.

4532 *Improvement of Local Meat Goats.*

It is intended to import selected breeds of goats for crossing with local meat goats to improve weight and quality. The estimated cost is Shs. 140,000/-.

4533 *Improvement to Dairy Goats.*

Exotic dairy goats are to be imported for crossing with local stock to produce improved breeding stock for sale to local farmers. The cost is estimated at Shs. 104,000/-.

4303 *Rural Training Centres.*

As a result of change in the organization of rural training at the district level, the District Training Centres of Maendeleo, Farmers' Training Centres of Kilimo and the Rural Craft Centres of Kilimo will be amalgamated, to form integrated Rural Training Centres. Within these centres various training activities will be co-ordinated. The objective will be achieved by expanding existing and proposed specialist centres to become full-scale Rural Training Centres.

Each Rural Training Centre would be under the immediate management and supervision of an officer, responsible to Kilimo. The management would be assisted by a management committee or "Board of Governors" at the district level, which would determine the annual calendar of courses according to development priorities of the district. Training will be provided in fields such as handicrafts, home economics, special youth training with prospects of providing more extended vocational, agricultural and craft training for youths as need arises. Rural Training Centres will also play a major role in making available specific training programmes to meet the needs of ujamaa villages.

As a first step, it is intended to carry out the physical and organizational consolidation of the existing types of facilities viz. the District Training Centres under Maendeleo and the Farmers' Training Centres under Kilimo.

A provision of 9·75 million shillings has been made in the five year period for the establishment of new multi-purpose rural training centres outlined above. The numbers and location of these will be governed by the requirements of Maendeleo, Kilimo, Mincom and TANU.

4304 *Improvements to the Existing Farmers' Training Centres.*

With a view to expanding training facilities improvements in existing centres are estimated to cost Shs. 1·2 million.

4305 *Completion of District Training Centres.*

At the same time, a provision of Shs. 400,000/- is made for the completion of the District Training Centres at Mbeya and Mtwara carried over from the first Five-Year Plan.

4306 *Mobile Training Units.*

In order to increase the effectiveness of extension staff in rural areas it is planned to provide 19 long-wheel base landrovers and teaching/demonstration material based upon F.T.C.'s*. Total estimated cost of the Units is Shs. 385,200/-.

4307 *Primary School Leavers' Training.*

It is planned to start small schemes in the regions to assist primary school leavers to become competent farmers. The school leavers will be given credit by the Regional Agricultural Officers. They will work in groups under the supervision of agriculture extension workers. The project will cost Shs. 210,000/-.

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*F.T.C. Farmers Training Centre.

4308 *Dairy Training Centre.*

The project is designed to train A.F.O.'s and F.A.'s, in dairying, to meet the impending demand for increased numbers of extension staff in this field. The estimated cost is Shs. 320,000/-.

4309 *Forest School, Olmotonyi.*

This involves the extension of the already established Forest School at Olmotonyi. The cost of extension is estimated at Shs. 1,070,000/-.

4310 *In-service Training Centre.*

The Centre will provide refresher special courses for the Ministry's employees and will cost Shs. 500,000/-.

4311 *MATI, Mtwara.*

An additional Agricultural Training Institute to train Assistant Field Officers is planned to be established at Mtwara. The total cost is estimated at Shs. 4,808,000/-.

4312 *MATI, Mbeya.*

A second new Agricultural Training Institute to train Assistant Field Officers will be put up at Mbeya at an estimated cost of Shs. 9,616,000/-.

4313 *New MATI.*

To meet the training needs of Assistant Field Officers a third MATI is also planned. The site has yet not been decided. The estimated cost is Shs. 4,808,000/-.

4314 *Improvement to Existing MATIS.*

Extensions to existing MATI'S is planned to enable them to handle a larger number of trainees. Shs. 1,000,000/- is to be spent for these extensions.

4316 *Agricultural Diploma College.*

A new Agricultural Diploma College is to be built in place of the present Morogoro College which is being taken over to form the nucleus of the new Faculty of Agriculture, University College, Dar es Salaam. The cost is estimated at Shs. 14,000,000/-.

4317 *Fisheries Training and Marine Research, Kunduchi.*

This is a Dutch technical assistance project. This will finance research in coastal areas, concentrating on prawns and lobsters, shellfish, seaweeds, and fishing methods. The Government will contribute Shs. 2,120,000/- during the plan period.

2102 *Nordic Research Station, Mbeya.*

A Nordic financed Research Station is planned for Mbeya. Government will finance the preparation of site among other aspects. The cost will be Shs. 8,334,000/-.

2103–6 *Sub-station of Ukiriguru, Lyamungu, Mtwara and Ilonga.*

It is intended to provide more research facilities at existing sub-stations and to extend the application of research undertaken at Agricultural Research centres and facilitate innovation. All these sub-stations will cost Shs. 1,841,000/-.

2107 *New Sub-stations.*

To provide additional research coverage where information is urgently required as a basis for increased and/or more diversified agricultural production, new sub-stations are to be established. Further studies are underway to determine appropriate sites. The estimated cost is Shs. 4,300,000/-.

2108 *Veterinary Chemistry Extension, Temeke.*

The existing chemistry laboratory and conference facilities at Temeke are to be expanded at an estimated cost of Shs. 80,000/-.

2109 *Livestock Breeding Station, Mpwapwa.*

The experimental work in breeding dual purpose (beef and milk) cattle, is to be continued. Beginning is also to be made for extension work from the station, introducing improved beasts and husbandry practices to the surrounding villages. The cost is estimated Shs. 846,200/-.

2110 *Livestock Breeding Station, Tanga.*

The station will produce suitable animals, both male and female, for sale or, in the case of bulls, on loan. The project is estimated to cost Shs. 200,000/-.

2111 *Central Soil Laboratory.*

It is intended to construct a soil chemistry laboratory. The construction will cost Shs. 2,000,000/-.

2112 *Plant Pathology Laboratory.*

A laboratory to investigate plant diseases e.g. coffee berry disease, tobacco blight, wheat rust, aflatoxin in groundnuts etc. is provided for. The total cost of the project is Shs. 200,000/-.

2113 *National Food Science and Nutrition Institute.*

To improve standards of nutrition—including production of high protein foods-stuffs, it is planned to set up a Food Science and Nutrition Institute at an estimated cost of Shs. 5,446,000/-.

2114 *Plant Quarantine Station.*

It is intended to establish a Plant Quarantine Station where various plants are grown and tested. Once it is assured that the plants are free from disease, seeds can be distributed to the farmers. The station is estimated to cost Shs. 650,000/-.

2115 *Tse-Tse Control Research Institute.*

A research institute to conduct reseach into certain aspects of insecticidal tse-tse control and to provide a series of short courses to in-service staff on general and specialized aspects of tse-tse and sleeping sickness control is planned. The estimated cost of the institute is Shs. 732,700/-.

2116. *Forest Research Station, Pugu.*

The construction and equipment of a modern research centre to do general forestry research work is planned at Pugu. The total cost of the centre is estimated Shs. 4,080,000/-.

2117 *Banana Research.*

A "Rockfeller" financed research centre for which the Tanzania government meets some of the costs is planned for research on banana growing. The total cost of research centre is Shs. 20,000/-.

2118 *Sorghum Research.*

This is an E.A.F.R.O. financed research centre for which Tanzania meets some of the costs. The total cost of research centre is Shs. 7,000/-.

2119 *Village Storage Research.*

This is intended to investigate and improve the traditional methods of food storage. This project will also investigate and experiment with other methods of food storage at farm and village level. The estimated cost is Shs. 300,000/-.

2120. *Forestry Research.*

This is a continuing programme for research on various aspects of forestry development, including feasibility studies, species trials, side testing, studies of tending methods, utilization research, harvesting research, advice to saw milling and wood-working industries. The project will cost Shs. 7,692,500/-. during the plan period.

2121 *Lake Victoria Fisheries Research.*

This is a U.N. assisted project which deals with fisheries research in Lake Victoria. Kenya and Uganda also collaborate in the Project. The Tanzania Government will contribute Shs. 168,400/-.

2122 *Lake Tanganyika Fisheries Research.*

Lake fisheries will be developed in collaboration with the Democratic Republic of Congo, Burundi and Zambia. Through research, exploration and demonstration, this will provide fishing training and market study as a basis for the future development and management of the resources of the lake. The share of Tanzania Government will be Shs. 1,755,700/-.

2125 *East Coast Fever Control.*

Involves research into the control of East Coast Fever and the building of cattle dips. The project is estimated to cost Shs. 1,651,300/-.

4413 *T.A.M.T.U. (Tanganyika Agricultural Machinery Testing Unit).*

T.A.M.T.U. is to be moved from Tengeru to Malya. The project entails the re-construction of workshop buildings and staff quarters and installation of an electrical generator. The cost will be Shs. 528,000/-.

4902 *Extension Aids Workshop.*

A central workshop is planned to be established to produce a wide variety of equipment for KILIMO extension and training programmes. The cost of the workshop is estimated at Shs. 800,000/-.

4414 *Agricultural and Co-operatives Films.*

The unit will provide reproduction facilities so that films can be copied. The cost of this Unit is estimated at Shs. 1,700,000/-.

4903 *Mobile Extension Vans.*

17 well equiped cinema vans will be operated (one in each region) to show agricultural films. The capital cost is estimated Shs. 550,000/-.

2123 *Pasture Research Institute.*

An Institute to investigate local grazing problems which limit production and to carry out limited basic research into grazing control is to be established. The estimated expenditure of the Institute is Shs. 4,000,000/-.

2124 *Research Station, Mtwara.*

The new research station planned for Mtwara will, among other things, perform research on cashewnuts. The cost will be Shs. 1,500,000/-.

The programme of the Disivion is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
1201	Vaccine Production Plant	—	—	10,000,000	10,000,000
4532	Improvement of Local Meat Goats	—	127,300	12,700	140,000
4533	Improvement of Local Dairy Goats	—	—	104,000	104,000
4303	Rural Training Centres (new)	1,590,750	2,190,750	5,972,250	9,753,750
4304	Improvement to F.T.Cs	240,000	240,000	720,000	1,200,000
4305	Completion of 2 D.T.Cs—Mbeya, Musoma	400,000	—	—	400,000
4306	Mobile Training Units	—	84,700	300,500	385,200
4307	Primary Leavers Training	70,000	140,000	—	210,000
4308	Dairy Training Centre	—	320,000	—	320,000
4309	Forest School, Olmotonyi	221,000	261,000	588,000	1,070,000
4310	In-Service Training Centre	200,000	300,000	—	500,000
4311	M.A.T.I., Mtwara	—	1,500,000	3,308,000	4,808,000
4312	M.A.T.I., Mbeya	1,500,000	2,000,000	6,116,000	9,616,000
4313	New M.A.T.I.	—	1,000,000	3,808,000	4,808,000
4314	Improvements to existing M.A.T.Is.	500,000	500,000	—	1,000,000
4316	Agricultural Diploma College	1,000,000	2,000,000	11,000,000	14,000,000
4317	Fisheries Training and Marine Research, Kunduchi	720,000	700,000	700,000	2,120,000
2102	Nordic Research Station, Mbeya	1,000,000	1,000,000	6,334,000	8,334,000
2103	Sub-station, Ukiriguru	605,000	136,000	—	741,000
2104	Sub-station, Lyamungu	130,000	—	—	130,000
2105	Sub-station, Mtwara	282,000	108,000	—	390,000
2106	Sub-station, Ilonga	225,000	180,000	175,000	580,000
2107	New Sub-station	—	500,000	3,800,000	4,300,000
2108	Veterinary Chemistry Extension, Temeke	80,000	—	—	80,000
2109	Livestock Breeding Station, Mpwapwa	241,200	200,000	405,000	846,200
2110	Livestock Breeding Station, Tanga	—	200,000	—	200,000
2111	Central Soil Laboratory	—	—	2,000,000	2,000,000
2112	Plant Pathology Laboratory	—	—	200,000	200,000
2113	National Food and Nutrition Institute	—	1,000,000	4,446,000	5,446,000
2114	Plant Quarantine Station	650,000	—	—	650,000
2115	Tsetse Control Research Institute	100,000	500,000	132,700	732,700
2116	Forest Research Station, Pugu	—	888,800	3,191,200	4,080,000
2117	Banana Research, Maruku	20,000	—	—	20,000
2118	Sorghum Research, Ukiriguru	3,500	3,500	—	7,000
2119	Village Storage Research	100,000	100,000	100,000	300,000
2120	Forestry Research	500,000	500,000	6,692,500	7,692,500
2121	Lake Victoria Fisheries Research	168,400	—	—	168,400
2122	Lake Tanganyika Fisheries Research	100,000	100,000	1,555,700	1,755,700
2125	East Coast Fever Control	551,600	551,700	548,000	1,651,300
4413	T.A.M.T.U.	269,000	259,000	—	528,000
4902	Extension Aids Workshops	500,000	300,000	—	800,000
4414	Agriculture and Co-operative Films	200,000	200,000	1,300,000	1,700,000
4903	Mobile Extension Vans	—	—	550,000	550,000
2123	Pasture Research Institute	—	—	4,000,000	4,000,000
2124	Cashew Research Station, Mtwara	1,500,000	—	—	1,500,000
	Total—Training and Research Division	13,667,450	18,090,750	78,059,550	109,817,750

SECTION IV—NATURAL RESOURCES DIVISION

This Division is responsible for the development and utilization of forestry, fisheries and game throughout the country. During the Second Five-Year Plan, increased emphasis is to be placed on marketing and utilization of products. Improvement of traditional processing methods in fisheries aimed at decreasing wastage will also be introduced. In forestry—afforestation programmes are now coming into production. Emphasis is, therefore, placed upon efficient and full utilization of this large and valuable resource. This Division's programme over the five years is estimated to cost Shs. 119·9 million.

FORESTRY

1202 *Logging Units (Softwood).*

Five softwood logging units will be established, including roads, to supply softwood to sawmills. The capital cost of the units is estimated at Shs. 1,600,000/-.

1203 *Logging Units (Hardwood).*

Four hardwood logging units will be established, including roads to supply hardwood to sawmills. The cost of these four units is estimated in total Shs. 2,880,000/-.

1204 *Sawmill (Softwood)*

Five softwood sawmills with proper drying facilities will be established to produce seasoned timber and facilitate the development of wood-using industries. The cost will be Shs. 4,600,000/-.

1205 *Sawmill (Hardwood).*

Four hardwood sawmills with proper drying facilities will be established to produce seasoned timber and facilitate the development of wood-using industries. The estimated total cost is Shs. 3,400,000/-.

1206 *Charcoal Production.*

Ten charcoal producing units will be set up and operated during the Five-Year Plan. They will be phased at the rate of two per year to augement existing supplies. The total expenditure is estimated at Shs. 900,000/-.

1207 *Transmission Poles and Fence Posts.*

It is intended to produce transmission poles and fence posts for supply to existing local users and for the needs of the Tanzania Zambia railway. Some of the production may also be exported. The cost is estimated at Shs. 400,000/-.

1419–1420 *Hardwood and Softwood Planting.*

The project is designed to establish additional plantating of trees and maintain the new and existing plantations at an estimated cost of Shs. 49,408,700/- during the Second Five-Year Plan.

4603 *Catchment Forests.*

It is proposed to spend Shs. 3,786,600/- for the protection of existing reserves. This includes permanent boundary demarcation and provision of fire protection equipment, etc.

4604 *U.N.D.P. Forest Industries Development Project.*

This project is designed to assist the Government in preparing an overall forest and forest industries development plan. It includes the establishment of a softwood sawmill and wood-working shop as well as training Tanzanian personnel in forest utilization and saw-milling. The Tanzania Government has allocated Shs. 192,000/- for this project.

1421 *Development of Indigeneous Forests.*

To meet the future demand for timber more intensive management of selected indigeneous forest areas will be undertaken. Investment in infrastructure will be required to permit the industrial utilization of the crop. The estimated cost is Shs. 3,830,000 during the Plan period.

4606 *Miscellaneous Forest Services.*

This project includes provisions for equipment to make the survey section fully operation and also to initiate the new programme of woodland anumeration in specific areas to facilitate the correct siting and planning of forest industries. The total cost in estimated at Shs. 2,008,000/-.

4607 *Forest Management.*

The project is designed to provide for controlled harvesting of forest areas, licensing and revenue collection, and to prevent theft of timber and other forest produce or the destruction of forests by encroachment. Provision is chiefly for housing staff near forest areas, together with a small number of vehicles. The cost of project will be Shs. 1,035,400/-.

4608 *Beekeeping.*

An extension programme is designed to encourage more people to keep bees, to use modern techniques of bee-keeping and to assist them in organized marketing of honey and beeswax. To supplement the extension programme some research and training is required and limited provision is made for buildings, equipment and vehicles. The estimated cost is Shs. 2,068,300/-.

4609 *Regional Tree Nurseries.*

The project involves the development and running of small tree nurseries in the more barren parts of each region for providing transplants to the local people at cost price, enabling them to grow their own requirements of firewood and building poles. The project will cost Shs. 600,000/-.

1703 *Central Marketing Project.*

It is intended to establish a marketing organization to co-ordinate and rationalise the use of timber; to seek new, especially export, markets and promote the use of lesser-known timber species. The total cost is estimated at Shs. 2,806,000/-.

The forestry programme is phased as follows: —

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
1202	Logging Units—Softwood ...	—	600,000	1,000,000	1,600,000
1203	Logging Units—Hardwood ...	—	—	2,880,000	2,880,000
1204	Sawmills, Softwood	—	2,600,000	2,000,000	4,600,000
1205	Sawmills, Hardwood	—	—	3,400,000	3,400,000
1206	Charcoal Production	50,000	200,000	650,000	900,000
1207	Transmission Poles and Fence Posts	—	—	400,000.	400,000
1419	Hardwood Planting	1,500,000	1,000,000	4,917,700	7,417,700
1420	Softwood Planting	6,122,400	8,031,600	27,837,000	41,991,000
4603	Catchment Forests	550,000	450,000	2,786,600	3,786,600
4604	Forest Industries Development Project (U.N.D.P.)	156,000	36,000	—	192,000
1421	Development of Indigenous Forests	500,000	500,000	2,830,000	3,830,000
4606	Miscellaneous Forest Services ...	400,000	300,000	1,308,000	2,008,000
4607	Forest Management	537,000	250,000	248,400	1,035,400
4608	Beekeeping	720,000	63,000	1,285,300	2,068,300
4609	Regional Tree Nurseries ...	200,000	200,000	200,000	600,000
1703	Central Timber Marketing Project	—	—	2,806,000	2,806,000
	Sub-Total—Forestry ...	10,735,400	14,230,600	54,549,000	79,515,000

FISHERIES

1514 *Fish Processing and Port Terminal Facilities, Kigoma.*

A hot air drying plant, as well as storage and distribution facilities for dagaa will be established. There will also be provision of port facilities. The total cost of the project is Shs. 305,000/-.

1515 *Fish Protein Concentrate, Mwanza.*

The project includes fishing of haplochromis from Lake Victoria and Commercial production of fish protein concentrate. Distribution will be through the National Milling Corporation. The cost is estimated at Shs. 100,000/-.

1516 *Boat Building.*

Expansion of existing Mwanza and Dar es Salaam boat yards and construction of two new boat yards at Mikindani and Itungi Port is planned at a total cost of Shs. 1,500,000/-.

1704 *Fisheries Port Facilities.*

(i) Aims at producting wholesale marketing facilities so that the marketing of fish can be taken out of the hands of middlemen and cheap fish made available to the cities.

(ii) In the long run the intention is to provide the infrastructure needed as a pre-condition for the establishment of a deep-sea fishery industry.

1518–1519 *Village Fishing Units.*

The project is aimed at provision of boats for modern fishing and shore-based storage facilities. It also includes provision for local marketing. These will be eventually handed over to co-operative organizations as they are developed. The total estimated cost is Shs. 8,140,000/- during the Second Five-Year Plan.

1702 *Fish Receiving Stations.*

The project is designed to:

(i) Provide wholesale markets for fish with ice-making plants and short-term cold storage.

(ii) Make it possible for a commercial freezing and filleting plant to be set up nearby.

The total cost is estimated at Shs. 1,200,000/-.

4534 *Coastal Fisheries Development, Mbegani.*

This project encompasses the completion of the original building programme as well as provision for boat-building facilities at Mbegani. The project will cost Shs. 700,000/-.

4535 *Development of Fisheries Services.*

This project will enable new fishing techniques to be introduced by demostration and advice. The Fisheries Division will be equipped with boats, workshops and mobile repair units will be set up and the basic national network of fisheries services centres completed. The total cost is estimated Shs. 1,200,000/-.

The programme is phased as follows: —

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
1514	Fish Processing and Port Terminal Facilities, Kigoma ...	—	185,000	120,000	305,000
1515	Fish Protein Concentrate, Mwanza	100,000	—	—	100,000
1516	Boat Building	176,300	180,000	1,143,700	1,500,000
1704	Fisheries Port Facilities ...	855,000	—	1,560,000	2,415,000
1518	Village Fishing Units, Lake Areas	160,000	420,000	2,860,000	3,440,000
1519	Village Fishing Units, Coast ...	450,000	900,000	3,350,000	4,700,000
1702	Fish Receiving Stations, Lake Victoria	—	600,000	600,000	1,200,000
4534	Coastal Fisheries Development, Mbegani	500,000	200,000	—	700,000
4535	Development of Fisheries Services	300,000	300,000	600,000	1,200,000
	Sub-Total—Fisheries ...	2,541,300	2,785,000	10,233,700	15,560,000

GAME

4319 *Game Scout School.*

A school at Mwanza will be established to train the subordinate and junior staff of the Game Division. The school will have facilities for 40 students, the standard course being of 6 months' duration. The cost is estimated at Shs. 196,000/-.

4415 *Wildlife Utilization.*

This project aims at protecting agricultural land from big game, providing protein from wildlife, at the same time encouraging local hunting societies in appropriate cricumstances. The project will cost Shs. 3,000,000/-.

1602 *Tourist Development of Game Areas.*

It is planned to develop the tourist potential of all wildlife areas. Total amount of Shs. 14 million is required for areas not included in the National Parks programme, particularly the Selous Game Reserve.

1603 *Ngorongoro.*

Improvements to tourist facilities and extension of conservation work within the area is planned. It also includes the expansion of Olduvai museum, forestry wildlife research, roadworks, construction of staff quarters and water supplies, advertising and publicity. The project will also extend veterinary services for Masai cattle heards. The estimated cost of this project is Shs. 6 million.

1604 *Marine Reserve.*

A series of marine reserves will be established to extend protection to habitat breeding grounds to those critical areas where if production does not occur, marine species will disappear as valuable commercial or sporting resources. The provision of Shs. 1,650,000/- is for staff buildings, boats, beacons and other equipment.

The programme of this Division is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72-1973/74	Total Estimated Expenditure 1969/70-1973/74
4319	Game Scout School	196,000	—	—	196,000
4415	Wildlife Utilization	500,000	750,000	1,750,000	3,000,000
1602	Tourist Development of Game Areas	1,250,000	2,000,000	10,750,000	14,000,000
1603	Ngorongoro	1,200,000	1,200,000	3,600,000	6,000,000
1604	Marine Reserve ...	—	—	1,650,000	1,650,000
	Sub-Total—Game ...	3,146,000	3,950,000	17,750,000	24,846,000
	Total—Natural Resources Division	16,422,700	20,965,600	82,132,700	119,521,000

SECTION V—CO-OPERATIVE DEVELOPMENT DIVISION

Kilimo's investment programme to back the co-operative development, is oriented to supply the co-operative movement with some necessary equipment and organize the training facilities. Together with advisory and inspection services at Regional and District levels, it is intended to help co-operatives towards an increasingly production oriented role. The programme is estimated to cost Shs. 4·9 million.

4416 *Equipment for Co-operative Development Staff.*

The project involves supply of vehicles, mainly landrovers, to Regional and District Co-operative Officers and camp beds, mosquito-nets, etc. for newly appointed Co-operative Officers and Inspectors. The total cost of this project will be Shs. 576,400/-.

4320 *Co-operative College Extension, Moshi.*

It is intended to expand Co-operative training in order to meet the expanding needs of the Co-operative Development Division and the Co-operative movement. The project involves new accommodation for specialized short courses and for diploma level training. The estimated cost is Shs. 1,824,100/-.

4321 *Co-operative Training Bursaries.*

Funds will be required to provide bursaries for secretaries and similar staff from the financially less well placed unions/societies so as to treble the average number of trainees on the 3-month courses during the Second Five-Year Plan. An amount of Shs. 2,500,000/- is estimated to be spent.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4416	Equipment for Co-operative Development	112,000	338,000	126,400	576,400
4320	Co-operative College, Extension	307,000	80,500	1,436,600	1,821,001
4321	Co-operative Training Bursaries	400,000	550,000	1,550,000	2,500,000
	Total—Co-operative Division	819,000	968,500	3,113,000	4,900,500

SECTION VI—WATER DEVELOPMENT AND IRRIGATION DIVISION

The strategy for water and irrigation development is discussed in detail in Volume I.

The provision of adequate water supplies to rural areas has been assigned very high priority on both economic and social grounds. Rural domestic water supplies are a necessity for better life in rural areas. Top priority is to be given to low cost methods for providing rural water. All possible self-help will be mobilized.

The Irrigation programme includes provision for implementation of large-scale irrigation and for an expanded programme of surveys and investigations for further investment possibilities.

2301 *Surveys and Investigations for Irrigation Projects.*

The development of irrigation projects calls for careful study of soils, water, topography and engineering considerations, all of which require time and forward planning. To achieve this end, this project aimed at gathering all the necessary data to assess the economic, agronomic, and engineering feasibility of schemes, and to allow for the prepartion of detailed designs, has been formulated. The total cost will be Shs. 12 million during the plan period.

4704 *Irrigation Development—Flood control.*

This is a dual purpose scheme intended to finance:—

(a) projects in respect of which detailed engineering feasibility studies and designs would have been completed under project 2301 and which require funds for implementation.

(b) emergency projects which might arise from time to time in connection with flood control.

4701 *Satellite Ujamaa Village Irrigation.*

Based on the principle of Arusha Declaration, small village irrigation schemes communally organized have been planned, initially one for each region.

Design work is already in hand for the Sonjo (Tabora Region), Kalenga (Iringa Region), and Mombo (Tanga Region) Schemes. Crops grown will include rice, wheat and vegetables.

Total expenditure for the plan period is estimated at Shs. 3,000,000/-.

2302 *Hydrometeorological survey of the catchments of Lakes Victoria, Kyoga and Albert.*

In co-operation with the Government of Kenya, Uganda, Sudan and the United Arab Republic, a 10 year hydrometeorogical survey of the source of the River Nile is being carried out. The project is initially being aided by the U.N.D.P. and involves the establishment of river gauging stations on all the main rivers feeding Lakes Victoria, Kyoga and Albert, and the establishment of an adequate number of meteorological stations to gather accurate meteorological data. The estimated cost is Shs. 3,030,000/-.

2303 *Kagera River Development Feasibilty Studies.*

The project aims at carrying out a thorough investigation into the multi-purpose development of the Kagera River Basin. The river has a considerable hydro-electric power potential of interest to Tanzania, Burundi, Rwanda and Uganda. In addition to flood control, this would free valuable land for development in the West Lake Region.

A joint approach to the study by all four interested Governments is being sought. Tanzania's share of the costs is estimated at Shs. 1,100,000/-.

2304 *Stiegler's Gorge—Feasiability Study.*

A detailed study of the Lower Rufiji River Basin is planned with a view to designing a multi-purpose dam at Stiegler's Gorge. The project will include economic and sociological studies; the detailed engineering investigations of Stiegler's Gorge Dam site and the outline design of the dam; a detailed study of the effect of flood control on the life of the people of the Lower Rufiji and the outline design of irrigation facilities to effect the necessary re-adjustments.

Stiegler's Gorge presents a good potential source for hydro-electric power, there being a generation potential of some 400 to 500 megawatts of electric power. The detailed feasibility studies leading to design will be undertaken immediately so that a power station can come into service by 1982/85. The estimated cost of the project is Shs. 10 million.

2101 *Kilombero Agricultural Training and Research Institute (KATRIN).*

An Institute to conduct training in agricultural and irrigation techniques and research into irrigation problems has been established at Ifakara and will come into operation during the Second Five-Year Plan. A provision of Shs. 2,800,000/- has been made for the purchase of machinery and equipment.

2305 *Surveys and Investigations—Rural Water Supply.*

The provision of water supplies can only follow from detailed field investigations into sources and quality of water. The project involves preparation of topographical surveys and engineering designs of projects. The total cost is estimated at Shs. 27 million for the plan period.

3201 *Rural Water Supply Development.*

The project involves the construction of water supplies in rural areas throughout mainland Tanzania at a total capital cost of Shs. 73 million.

4702 *Mbarali Irrigation State Farm, Usangu Plains.*

The expansive irrigation scheme started on the Usangu Plains during the First Five-Year Plan has proved a viable proposition and 4,000 acres have been planted to paddy. There remains considerable consolidation work to be done, such as further land levelling and provision of further drainage measures. The scheme will be expanded to a 5,000 acre state farm with rice and wheat as the main crops and dairy farming as a subsidiary activity. A new intake and lead canal will be constructed also. In due course a further 5,000 acres will be developed as satellite village irrigation schemes surrounding the state farm, the latter will provide the services and expertise required by the satellite farmers. Further development will be dependent on the construction of a dam on the Mbarali river to impound floods and improve dry season flow. Total cost of the project is Shs. 11·6 million

4703 *Kahe Irrigation State Farm (Pangani Valley Development).*

A start was made in the First Five-Year Plan on the construction of a 10,000 acre irrigation scheme at Kahe, South of Moshi, utilizing water from the Miwaleni Springs released for irrigation by the construction of Nyumba ya Mungu Dam.

The main intake structure, lead canal and distribution system for some 2,000 acres are currently under construction. This project is intended to cover a gross area of 10,000 acres.

The first 5,000 acres will be developed as a state farm and the balance as satellite ujamaa villages relying on the state farm for services and expertise.

The main crops to be grown will include wheat, maize, lucerne, kenaf, vegetables, beans and chillies. Dairy cattle will be kept for milk production. A total of Shs. 12·8 million is estimated to be spent.

4301 *Training.*

In order to meet the expanded works programme, an expanded training programme for the training of Technicians (Technical Assistants), Geological Assistants and Technical Auxiliaries will be embarked upon. The project will cost Shs. 15·7 million and will cover expenses arising from training, transport and purchase of equipment.

4302 *Expansion of W.D. & I.D. facilities.*

The expanded W.D. & I.D. programme, particularly in the field of Rural Water Supplies, requires strengthening of W.D. & I.D.'s resources to meet the programme. Workshops are required for field maintenance of Rural Water Supply installations, plant and vehicles. The new depots will be established in those areas not adequately served at the present time.

The construction of new depots for W.D. & I.D. in Mara Region; Ruvuma Region and Kigoma Regions is planned to cost Shs. 10,600,000/-.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
2301	Surveys and Investigations throughout the country ...	500,000	1,000,000	10,500,000	12,000,000
4704	Irrigation Development and Flood Control	—	1,000,000	14,670,000	15,670,000
4701	Satellite Ujamaa Village Irrigation	500,000	500,000	2,000,000	3,000,000
2302	Hydrometeorological Survey ...	430,000	600,000	2,000,000	3,030,000
2303	Kagera River—Feasibility Study	150,000	450,000	500,000	1,100,000
2304	Stiegler's Gorge—Feasibility Study	1,500,000	3,000,000	5,500,000	10,000,000
2101	Katrin Research and Training	1,000,000	1,000,000	800,000	2,800,000
2305	Rural Water Supply Surveys and Investigations...	5,000,000	5,800,000	16,200,000	27,000,000
1201	Rural Water Supply Development	10,000,000	12,000,000	51,000,000	73,000,000
4702	Mbarali Irrigation Scheme ...	2,500,000	2,500,000	6,600,000	11,600,000
4703	Kahe Irrigation Scheme ...	2,500,000	2,500,000	7,800,000	12,800,000
4301	Training—Rural Water Supply	1,000,000	1,000,000	2,000,000	4,000,000
4302	Expansion of W.D.I.D. facilities	1,000,000	1,400,000	8,200,000	10,600,000
	Total for the Division ...	26,080,000	32,750,000	127,770,000	186,600,000

SECTION VII—ADMINISTRATION AND PLANNING DIVISION

4417 *Market Development and Training Centre.*

It is intended to establish, with assistance from UNSF, a centre for market Development and Training which will be closely linked with the Planning, Marketing and Statistics Section of the Ministry of Agriculture, Food and Co-operatives. The Centre will be responsible for market research and investigations, for exploring new marketing services including market intelligence, and for providing practical guidance and demonstration in marketing operations and the training of associated staff. The cost of the project is estimated at Shs. 1,650,000/-.

5301 *Extension—Staff Housing.*

It is proposed to construct up to 2,000 low cost houses for Assistant Field Officers and 50 houses for Field Officers, for staff serving in remote areas whose efficiency is adversely affected by lack of basic accommodation. The total cost of the houses will be Shs. 9,842,200/-.

4418 *Development of New Crops.*

The project is designed to provide facilities, nurseries, observation/demonstration/trial farms for the production of crops at present of minor importance but with prospects of development. The allocation of funds (Shs. 3,000,000/-) will be controlled by the Department of Administration, Personnel and Planning.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4417	Market Development and Training Centre	80,000	445,000	1,125,000	1,650,000
5301	Extension-Staff-Housing ...	796,800	1,611,800	7,433,600	9,842,200
4418	Development of New Crops ...	500,000	500,000	2,000,000	3,000,000
	Total—Administration and Planning Division ...	1,376,800	2,556,800	10,558,600	14,492,200
	Total—Ministry ...	88,868,750	106,889,750	439,786,250	635,544,750

B. PARASTATAL PROGRAMME

SECTION I—NATIONAL AGRICULTURE AND FOOD CORPORATION (N.A.F.C.O.)

The newly created N.A.F.C.O. is to take over N.D.C.'s agricultural activities: production and primary processing. It is expected to further expand the parastatal activity in the agricultural sector. N.A.F.C.O. is looked upon as a tool for large-scale production of foodstuffs.

Projects taken over by N.A.F.C.O. from the N.D.C. are the extension of the Sugar production in Kagera–Mtimbwa, designed to develop sugar estates to increase production capacity up to 30,000 tons, mechanized production of wheat and probably other crops at Basuto Plateau, Mbulu District (30,000 acres in 1971), production of coconut and processing on two estates in Mafia island and a modern abattoir to slaughter sheep and cattle for local consumption and for possible export, at Mbalizi, 7 miles south-west of Mbeya.

Investment in these projects during the five years is envisaged at Shs. 112·3 million. N.A.F.C.O. will review these schemes and possibly undertake other projects, contributing effectively in meeting plan targets in the agricultural sector.

The following is the tentative investment programme:

Project Designation	Total Estimated Exp. 1969/70—1973/74
Mafia Coconut Scheme	7,800,000
Sugar expansion, Kagera—Mtibwa ...	94,000,000
Basuto Wheat Scheme	10,100,000
Mbeya Abattoir	400,000
Total ...	112,300,000

SECTION II—TEA AUTHORITY

Tea Authority will carry on the previous activities of the Tea Board and develop new activities pertaining to Small Holder Tea Development.

The expansion of tea production has been given high priority in the Second Plan. The target is to plant a further 24,000 acres of small-holder tea by 1973/74 and to process the production in Tea Authority controlled factories (51 per cent T.A.—49 per cent co-operatives).

Tea Authority will, therefore, invest in establishment of tea, in factories and green leaf-transport, in roads and in nurseries. The Authority will carry on promotional as well as commercial activities. For training and extension programme, it will liase closely with Kilimo.

A total investment of about Shs. 89 million is expected during the 2nd Plan. It will be financed partly by N.D.C.A. loans, partly by an I.D.A. loan, and in part through contributions from the Government.

The following is the tentative investment programme of the Authority:

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Establishment of tea	2,400,000	3,940,000	30,260,000	36,600,000
Factories and green leaf transport	4,160,000	30,000	13,120,000	17,310,000
Roads	1,440,000	2,120,000	13,840,000	17,400,000
In-service training	1,020,000	90,000	1,470,000	2,580,000
Nurseries	3,430,000	2,740,000	8,460,000	14,630,000
Total ...	12,450,000	8,920,000	67,150,000	88,520,000

SECTION III—TANZANIA SISAL CORPORATION (T.S.C.)

Tanzania Sisal Corporation manages all public interests in the Sisal Industry. After the recent parastatal reorganization it has also been entrusted with the management of Ralli Estates and of the Kwaruguru Scheme.

T.S.C.'s development programme has three main aspects:—

1. To increase sisal production to 84,000 tons by the end of the plan with later capacity of about 100,000 tons. This requires intensive replantation as some estates before nationalization were somewhat neglected. Replanting is to be concentrated in the most suitable areas so as to increase productivity and lower production costs. The replantation programme is anticipated to cost Shs. 77·9 million.
2. To process sisal fibre into ropes and twines. The development of existing facilities will require an investment of about Shs. 2 million to increase production from 5,650 tons to 8,150 tons in 1974.
3. To diversify production. The Corporation's diversification programme includes cattle ranches, cashew nuts, rice and tea growing. It is also intended to start an integrated "maize and pig" project. The deversification programme is estimated to cost about Shs. 12·6 million.

The entire investment programme over the plan period is expected to be financed from the Corporation's own resources. The following is the summary of the anticipated capital investment of the Corporation:

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Sisal estates—Replantation	9,600,000	13,807,000	54,503	77,900,000
Cattle—(Azimio Scheme)	1,907,000	777,000	892,000	3,676,000
Cattle—dairy (Kange Scheme)	168,000	180,000	1,260,000	1,608,000
Cattle—dairy (Kilosa Scheme)	198,000	—	—	198,000
Maize—pigs	320,000	450,000	230,000	1,000,000
Rice—(Kilosa Scheme)	1,400,000	1,400,000	1,400,000	4,200,000
Cashew nuts (Kange-Ngomeni)	120,000	55,000	55,000	230,000
Tea (Kwamkoro)	297,000	331,000	981,000	1,609,000
Ropes and twines Processing	—	—	2,050,000	2,050,000
Total	14,000,000	17,000,000	61,471,000	92,471,000

SECTION IV—THE NATIONAL MILLING CORPORATION (N.M.C.)

N.M.C.'s activities centre around the management of the milling companies nationalized in 1967. It is charged with the responsibility of meeting the entire demand for milled flour at minimum prices. Lowering production costs through rationalization is the immediate objective of the Corporation. The Corporation is also expected to diversify its activities in canning and other allied fields.

The rationalization programme of the Corporation aims at modernizing the wheat mill in Iringa, the maize mill in Dar es Salaam and its Canning Division. A total investment of over Shs. 2 million is envisaged for this programme.

The N.M.C. plans to dismantle three rice mills and re-erect them in rice growing areas. With its four mills in Dar es Salaam, the transport costs have been unduly heavy and have been partly subsidized. With the spread of mills in rice growing areas, transport costs are expected to decrease by one-third. This will cost Shs. 90,000/-.

N.M.C. also intends to invest in adequate storage facilities which will reduce handling and transport costs. A sum of about Shs. 4 million is expected to be spent on creating these facilities. The N.M.C. will liase with N.A.P.B. in this matter.

With plans to increase wheat production in the South, the idle Dar es Salaam mill will be re-erected at Sumbawanga in 1971/72. The entire programme is expected to be financed from the Corporation's own resources.

The tentative investment programme will be as follows:

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Central workshop and Sparepart Store	—	410,000	—	410,000
Central laboratory and office extension	400,000	—	—	400,000
Modernization of wheat mill—Iringa	600,000	—	—	600,000
Feed plant modernization	400,000	—	—	400,000
Maize mill modernization	—	—	240,000	240,000
Re-erection of 3 rice mills	—	—	90,000	90,000
Storage	—	—	2,400,000	2,400,000
Wheat mill, Sumbawanga	—	—	1,640,000	1,640,000
Vehicles	340,000	180,000	370,000	890,000
Canning Division	—	—	100,000	100,000
Other investment	—	—	2,930,000	2,930,000
Total	1,740,000	590,000	7,770,000	10,100,000

SECTION V—LINT AND SEED MARKETING BOARD (LSMB)

The Plan puts considerable emphasis on increasing cotton production. The target for 1974 is 700,000 bales. To meet storage needs arising from such an increase in production the Lint and Seed Marketing Board plans to construct adequate storage facilities in the growing areas as well as in Dar es Salaam, for pre-export storage.

The LSMB intends to build storage facilities at railheads to ensure storage and rapid movement. The total investment in storage is estimated at Shs. 6·8 million. Storage facilities will be built in Shinyanga, Malampaka and Bukwimba and on few other railheads, not yet determined.

Present storage capacity at Kurasini is to be increased to reach a capacity of at least 200,000 bales. The stores will be equipped with lift trucks to reduce handling costs.

LSMB also intends to instal three new dusting machines. The board will also continue to finance cotton roads.

The following is the tentative investment programme of the Board:—

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Cotton stores—Kurasini ...	—	—	4,000,000	4,000,000
Storage—National	—	2,500,000	4,300,000	6,800,000
Lift trucks at Kurasini ...	—	700,000	—	700,000
New plantector dusting machines	—	150,000	150,000	300,000
Laboratory equipment ...	—	200,000	—	200,000
Total ...	—	3,550,000	8,450,000	12,000,000

SECTION VI—TANZANIA TOBACCO BOARD (T.T.B.)

Small holder production mainly of flue-cured tobacco is expected to reach 47·9 million pounds in 1947. T.T.B.s investment programme is designed to cater for this level of production.

The Board's investment will serve the expansion of this priority crop by providing storage facilities, better marketing possibilities and better processing equipment.

Three projects have been planned:

(1) Storage facilities and sales floors in the growing areas of Mpanda, Chunya, Iringa, Tabora and Songea. These will help maintain the quality and aroma and avoid storage in hired godowns.

(2) Cleaning and Curing complex Morogoro. Tanzania's tobacco has until recently been processed in Kampala. Therefore, storage facilities will be erected by the Tanzania Tobacco Processing Company (50 per cent Tobacco Board—50 per cent N.D.C.) in Morogoro.

(3) An auction floor, Morogoro. This will enable tobacco dealers to come to Tanzania and, thus, avoid the present depedance on one sole export agent.

The total cost of these projects will be Shs. 7·1 million and these are expected to be financed from the Board's own resources and with loans from N.D.C.A. and T.D.F.L.

The following is the tentative investment programme of the Board.

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Storage and sales floors ...	1,219,000	62,000	—	1,281,000
Cleaning and Curing Plant, Morogoro	2,700,000	—	—	2,700,000
Tobacco storage at Morogoro...	900,000	—	—	900,000
Tobacco Auction floor-Morogoro	728,000	728,000	729,000	2,185,000
Total ...	5,547,000	790,000	729,000	7,066,000

SECTION VII—NATIONAL AGRICULTURAL PRODUCTS BOARD (N.A.P.B.)

The major objective of N.A.P.B.'s programme is to provide adequate storage facilities for the growing volume of the crops it handles. It is aimed at avoiding wastage and reducing handling and marketing costs. With the exception of maize, production of all crops, wheat, rice, cashewnuts and oil seeds is expected to increase considerably over the plan period. This will require considerable investment in storage facilities.

For the three food grains, N.A.P.B. intends to build bag stores in Musoma, Tanga, Mwanza, Singida, Mpanda and Manyoni and silos in Iringa, Ismani, Arusha, Dodoma, Dar es Salaam and Sumbawanga (in conjunction with the N.M.C. wheat mill). These stores and silos will be situated either in production areas or in consumption centres. N.A.P.B. will also be starting the first stage of conversion from bag to bulk handling of grain during the plan period.

N.A.P.B. also intends to construct a maize cleaning plant at Dodoma and a groundnut selection plant in Dar es Salaam. These will help Tanzania to offer high quality groundnuts to overseas buyers.

Total investsment programme detailed below will cost about Shs. 25 million. It will be financed partly from N.A.P.B.'s own resources and partly from a SIDA loan.

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Bag stores	2,660,000	—	—	2,660,000
Silos	—	13,638,000	3,250,000	16,888,000
Storage—Sumbawanga... ...	—	—	2,400,000	2,400,000
Maize cleaning plant-Dodoma...	896,245	—	—	896,245
Groundnut selection plant-Dar es Salaam	880,000	—	—	880,000
Machinery	1 ,000,000	—	275,755	1,275,755
Total ...	5,436,245	13,638,000	5,925,755	25,000,000

SECTION VIII—NATIONAL DAIRY BOARD (N.D.B.)

The N.D.B. was established to ensure proper and speedy development of the dairy industry in Tanzania. Dairy development has been given high priority in the agricultural plan.

N.D.B. is at present involved in building the Dairy Plant at an estimated cost of Shs. 9·0 million with Danish assistance. Prospects for further development of the N.D.B. are still under consideration. It is, however, realized that a considerable potential for development exists.

The phasing of the milk plant is as follows: —

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Milk plant—Mara	7,800,000	500,000	700,000	9,000,000

SECTION IX—NATIONAL DEVELOPMENT CREDIT AGENCY (N.D.C.A.)

National Development Credit Agency provides credit for agriculture, mainly to small holders, through their co-operatives.

It aims at extending its activities during the Plan by developing its loans so as to help achieve agricultural targets defined in the Plan. Its forecast for loan requirements has been established after a thorough study at the regional and sectoral levels, and represents general estimates of credit needed for small scale producers and their marketing institutions to achieve or handle their part of the production goals.

N.D.C.A. anticipates to disburse the following types and magnitude of credit over the plan period:

1. Short-term credit for agriculture: seed, fertilizers, pesticides, especially for flue-cured tobacco (over 50 per cent)	196 million Shs.
2. Medium-term credit on farm: farm machinery, tractors and drawn implements for cotton, coffee, maize, wheat, tobacco, etc., ...	51 million Shs.
3. Credit for crop establishment, related to agricultural development plans, mainly for tea (95 per cent	38·5 million Shs.
4. Credit for livestock development, poultry (⅓), dairying (⅓), beef production and bee keeping	15 million Shs.
5. Credit for off—farm processing, especially tea factories and cotton ginneries	38 million Shs.
6. Credit for transport for co-operatives	13 million Shs.
7. Credit for storage	37 million Shs.
8. Credit for rural commercial development. (This is a new activity designed to promote small-scale commercial enterprises in rural areas) ...	12 million Shs.
Total ...	400·5 million Shs.

These are total amounts that are expected to be lent. Taking into consideration the repayments during the plan period, N.D.C.A.'s net lending requirements are estimated at Shs. 193 million (143 for medium and long term loans; 50 for short term).

For its expanded programme, N.D.C.A. plan to recruit more staff and to strengthen its administrative services. The aim is to provide credit supervisors to all regions. N.D.C.A. plans to spend Shs. 1,624,000/- during the plan period on office and housing accommodation, transport equipment.

The programme is phased as follows: —

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Housing transport and equipment	400,000	400,000	824,000	1,624,000

NET LENDINGS*

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Medium-term credit	3,000,000	3,800,000	7,200,000	14,000,000
Crop establishment	2,600,000	4,400,000	29,500,000	36,500,000
Livestock	1,200,000	1,900,000	5,900,000	9,000,000
Transport	3,600,000	—	6,900,000	10,500,000
Processing	5,600,000	3,800,000	22,600,000	32,000,000
Storage	10,200,000	10,800,000	12,000,000	33,000,000
Commercial development in rural areas	1,500,000	1,600,000	4,900,000	8,000,000
Total ...	27,700,000	26,300,000	89,000,000	143,000,000

*New funds required after repayment of former loans.

SECTION X—NATIONAL CO-OPERATIVE BANK (N.C.B.)

The N.C.B.'s primary function is to provide facilities for crop financing to co-operative unions.

During the plan period N.C.B., in addition to its own resources will require total credit facilities of about 950 million shillings for crop financing. Surpluses created are usually devoted to reduction of interest rate and to extension of activities.

In order to deal with the anticipated high demand for crop finance, N.C.B. intends to open new branches at Iringa, Arusha, Tabora (or Shinyanga), and Songea. N.C.B. therefore plans to construct the following office and housing accommodation during the plan period.

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Staff flats, Dar es Salaam ...	300,000	—	—	300,000
Staff flats, Iringa	60,000	—	—	60,000
Staff flats, Arusha	—	120,000	—	120,000
Branch Bank Tabora or Shinyanga	—	—	400,000	400,000
Branch Bank and flats in Songea	—	—	400,000	400,000
Total ...	360,000	120,000	800,000	1,280,000

(vii) MINISTRY OF ECONOMIC AFFAIRS AND DEVELOPMENT PLANNING

During the Second Five-Year Plan, it is intended to build up the existing Central Statistical Bureau to enable it to play its vital part in the economy. It is important to realize that up-to-date statistics are a prerequisite in the development of agriculture, forestry and industry, as well as town planning, housing, price and labour policy. With this in mind, efforts will be concentrated at creating by 1974, a Central Statistical Bureau, fully staffed by Tanzanians, and able to provide the most essential statistical data in various fields.

Except for the statistics of foreign trade, railways, harbours, civil aviation, posts and telecommunications which are processed by East African institutions, the production and publication of statistics relating to other important aspects of the economy will be centralized in the Bureau of Statistics. This step will help to reduce total cost of statistical production and lead to better co-ordination and utilization of limited manpower and other resources in the field of statistics.

The "Statistical Plan" for 1969/74 will entail:

(a) the re-organization of the present Central Statistical Bureau into six specialized statistics-producing sections and four service sections, which besides serving the former would also provide services to other institutions and the public;

(b) The expansion of the present establishment from 114 to about 238 by 1974.

The training of the statisticians at the University College, Dar es Salaam is expected to meet partly the demand arising from (b) above. However, the programme calls for a significant support in the field of technical assistance to furnish the national counterpart with statistical know how and to plan and build up statistical data collection in the various branches of statistics.

The following projects will be undertaken in the plan period:

4901 *Central Statistical Bureau Building and Equipment*.

A modern statistical building to accommodate the Bureau will be built at a cost of Shs. 4·2 million. This will be designed to handle the flow of considerable amount of basic statistical material and storing of data.

The Bureau is also intended to provide formal training to statistical officers with emphasis on acquisition of practical skills and efficiency in office and field performance. A further Shs. 1 million is allocated for the purchase of vehicles and statistical equipment.

2201 *Population Census.*

The actual population census took place in 1967. The money allocated (Shs. 300,000) to this project refers to Statistical processing of census returns. It is anticipated that the basic volumes will appear in 1969/70. Some additional statistical analysis will be undertaken in 1970/71.

2202 *Agricultural Census.*

This involves the collection of quantitative information on agricultural structure using agricultural holding as the unit of ennumeration, covering the whole country.

The Agricultural census results will provide a yard-stick against which the future agricultural development can be measured. This will cover various aspects e.g. land tenure, farm population, size and area of farms, crop production, etc.

Certain sectors of agriculture comprising about 1,500 units of large farms, estates, co-operative farms, and State farms are intended to be covered by complete ennumeration. The subsistence sector or peasant farms are supposed to be ennumerated on sample basis, comprising about 8,000 units.

2203 *Industrial Statistics.*

During the Second Plan period the scope of the Industrial Statistics Section is to be expanded and the work divided into two units:

(a) *The Manufacturing, Mining and Electricity Unit* responsible for statistics on establishments engaged in manufacturing, mining, quarrying and electricity generation and transmission, will continue and expand, where possible, on the facilities provided by the section at present.

(b) *Construction Unit.* The establishment of this unit is intended to provide detailed information on construction activity by type, by industry and by geographical area and also to obtain information on building materials, their availability, import content, utilization and prices. This unit would also attempt to construct a building cost index.

2204 *Household Budget Survey.*

The actual Household Budget Survey started in December, 1968. The field work is expected to continue until January 1970 after which the data collected will be processed, analysed and published.

The main aspects of this survey are: —

(i) to measure the standard of living of households in different parts of the country and among different categories of households.

(ii) to estimate the private household consumption for purposes of National Income, and to estimate future demand for consumption items.

2205 *Project Preparation.*

A sum of Shs. 4·8 million has been set aside for project preparaion for the first two years of the Plan. Ministries will be encouraged to prepare projects in advance and will be able to use the funds thus set aside. Projects prepared during any one year will be ready for implementation from the very beginning of the succeeding year. After some experience is gained with the use of such funds Ministries will be given individual votes for project preparation during the last three years of the Plan.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72-1973/74	Total Estimated Expenditure 1969/70-1973/74
4901	Central Statistical Bureau, building and equipment	—	—	5,200,000	5,200,000
2201	Population Census	260,000	40,000	—	300,000
2202	Agricultural Census	440,000	1,600,000	—	2,040,000
2203	Industrial Statistics	100,000	60,000	—	160,000
2204	Household Budget Survey ...	700,000	100,000	—	800,000
2205	Project Preparation	2,000,000	2,800,000	—	4,800,000
	Total ...	3,500,000	4,600,000	5,200,000	13,300,000

(viii) MINISTRY OF NATIONAL EDUCATION

SECTION I—PRIMARY EDUCATION

1. The plan provides for the ending of the selection barrier at standard IV in 1974 and for the first stage in a programme of expansion of the primary schools leading to Universal Primary Education (UPE) in or about 1989. During the Second Plan Period, this expansion of facilities will involve concentration on the provision of classrooms for Standards V to VII, in order that by 1974 all public primary schools may be in a position to offer seven years of education. The programme will also include some contribution to the expansion of Standards I to IV and to the provision of the necessary teachers' houses.

2. Capital development in the primary sector is inevitably expensive, not on account of the cost of particular buildings, but because of their large number. Thus, although secondary school buildings are far more expensive, only 30 new forms I are to be provided within the period of the Plan, whereas no less than 1,900 new standards I will be required to achieve the objectives of the Plan. In fact, so large is the number of classrooms and teachers' houses required, that their erection at normal commercial cost levels would be entirely prohibitive. It is clear, therefore, that the objectives of the Plan can only be achieved if the communities served by the schools contribute all the labour (other than skilled labour) required in the erection of premises as a voluntary contribution in a spirit of self-reliance. In the light of this, the costing of new premises has been confined to the cost of building materials and skilled labour.

3. The distribution of capital funds by Regions and Districts will depend on the number of children in them, but within Districts priority will be given to communities in which the spirit of Ujamaa is active. The allocation of capital to Regions will be governed by a formula (to be reviewed annually) which will ensure that some preference is given to Regions with a low intake at Standard I or Standard V per unit of the school-age population, to enable them to catch up with the national average.

TABLE I

PRIMARY EDUCATION ESTIMATED ENROLMENT AND ESTIMATED CAPITAL COST (Shs.)

Year	Enrolment			Fiscal Year	Capital Cost
	Std. I	Std. V	Stds. I–VII		
1970	171,900	82,300	870,800	1969/70	[illegible]
1971	180,000	98,900	906,400	1970/71	[illegible]
1972	189,000	113,200	977,000	1971/72	[illegible]
1973	198,400	127,800	1,056,500	1972/73	[illegible]
1974	209,300	147,300	1,140,100	1973/74	[illegible]

The construction of teaching accommodation and teacher's houses in phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5101	Teaching Accommodation ...	10,409,000	12,845,000	49,452,000	72,706,000
5102	Teachers' Houses	5,568,000	8,054,000	34,888,000	48,510,000
	Total ...	15,977,000	20,899,000	84,340,0000	121,216,000

SECTION II—SECONDARY EDUCATION

1. The priority given to secondary education during the First Plan Period has placed the country in a favourable position to meet the demand for high-level manpower with a comparatively moderate addition to the secondary school system during the Second Plan Period. The Plan provides for the addition of 30 new forms and new entry groups in form 5, all in science subjects. The estimated capital cost of this development is set out in Table II.

TABLE II

SECONDARY EDUCATION: ENROLMENT AND ESTIMATED CAPITAL COST (Shs.)

Year	Enrolment			Fiscal Year	Capital Cost
	Form 1	Form 5	Forms 1—6		
1970	7,320	1,490	30,690	1969–70	23,377,500
1971	7,530	1,580	31,600	1970–71	28,502,000
1972	7,740	1,680	32,490	1971–72	18,405,100
1973	7,950	1,780	33,510	1972–73	12,069,900
1974	8,160	1,870	34,530	1973–74	4,887,000

2. There are four main features of capital development in secondary education, viz.:—

(a) the building of 8 new schools;

(b) the enlargement of 12 existing schools;

(c) the completion of 13 existing schools to enable them to cater for the increased intake; and

(d) the provision in a number of schools of special premises for agriculture, commerce, manual crafts, or domestic science.

3. The schools involved in the first three categories in paragraph 2 are set forth in the following tables: final decisions about the location of the specialist accommodation mentioned in the fourth category have not yet been taken. In addition to the capital sums listed in Tables III, IV and V, the sum of Shs. 3,215,000/- has been set down to meet contingencies arising in connection with the programme of building to be assisted by a loan from the International Development Association.

TABLE III

NEW SECONDARY SCHOOLS (Forms 1-4)

Code	Place	Plan Size (Streams)	Size during Plan (Streams)	Type	Capital cost during Plan (Shs.)
4327	Tarime	4	4	Agricultural	8,034,000
4332	Mtwara	4	4	Technical (2 streams)	8,725,000
4333	Sengerema	4	4	Agricultural	8,080,000
4334	Coast Region	4	4	Agricultural	8,710,000
4335	Songea (Girls')	4	2	Dom. Science	4,500,000
4317	Njombe	4	4	Agricultural	7,400,000
4318	Karatu	3	2	Agricultural	3,640,000
4320	Nzega	3	3	Agricultural	6,180,000

TABLE IV

ADDITIONS TO SECONDARY SCHOOLS

Code	School	New places 1-4	New places 5-6	Capital cost during Plan (Shs.)
4302	St. Francis, Pugu	—	240	1,192,000
4303	Msalato	280	—	2,854,000
4306	Tosamaganga	140	—	1,242,000
4305	Assumpta	140	—	1,511,000
4307	Umbwe	140	—	1,952,000
4311	Galanos	140	—	245,000
4314	Rugambwa	—	48	1,328,000
4328	Mkwawa	—	288	780,000
4315	Alliance, Dodoma	—	240	1,644,000
4329	Old Moshi	—	96	240,000
4330	Arusha	140	—	300,000
4319	St. Mary's, Tabora	—	96	313,500

TABLE V

COMPLETION OF SECONDARY SCHOOLS

Code	School	Capital Cost during Plan (Shs.)
4321	Ilboru	589,000
4301	St. Andrew's, Minaki	360,000
4304	Livingstone	1,238,000
4325	Lyamungu	785,000
4322	Moshi Technical	1,391,000
4308	Alliance, Musoma	2,730,000
4323	Iyunga	422,000
4312	Alliance, Rungwe	620,000
4309	Marian	1,440,000
4310	Chidya	777,000
4324	Tabora (Girls')	1,290,000
4326	Tanga	1,458,000
4313	Ihungo	1,251,000
4331	Iringa (Girls')	805,000

The expenditure on secondary school programme is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4301	St. Andrew's S.S., Minaki ...	—	—	360,000	360,000
4302	St. Francis's S.S., Pugu ...	1,073,000	119,000	—	1,192,000
4303	Msalato Secondary School ...	1,427,000	1,427,000	—	2,854,000
4304	Livingstone Secondary School...	1,114,200	123,800	—	1,238,000
4305	Assumpta Secondary School ...	1,359,900	151,100	—	1,511,000
4306	Tosamaganga Secondary School	1,117,800	124,200	—	1,242,000
4307	Umbwe Secondary School ...	—	1,756,800	195,200	1,952,000
4308	Alliance S. School, Musoma ...	1,365,000	1,365,000	—	2,730,000
4309	Marian Sec. Sch., Morogoro ...	1,296,000	144,000	—	1,440,000
4310	St. Joseph's Sec. Sch., Chidya...	—	—	777,000	777,000
4311	Christos Galanos Sec. School...	—	245,000	—	245,000
4312	Alliance Sec. School, Rungwe ...	—	—	620,000	620,000
4313	Ihungo Secondary School ...	1,125,900	125,100	—	1,251,000
4314	Rugambwa Sec. Sch., Bukoba...	—	1,195,200	132,800	1,328,000
4315	Alliance Sec. Sch., Dodoma ...	—	—	1,644,000	1,644,000
4316	I.D.A. Contigency	—	644,000	2,571,000	3,215,000
4317	Njombe Secondary School ...	3,700,000	2,960,000	740,000	7,400,000
4318	Karatu Secondary School ...	—	—	3,640,000	3,640,000
4319	St. Mary's Secondary School, Tabora	313,500	—	—	313,500
4320	Nzega Secondary School ...	618,000	4,944,000	618,000	6,180,000
4321	Ilboru Secondary School ...	—	589,000	—	589,000
4322	Moshi Secondary Technical School...	—	1,391,000	—	1,391,000
4323	Iyunga Secondary School ...	—	—	422,000	422,000
4324	Tabora Girls Secondary School	1,290,000	—	—	1,290,000
4325	K.N.C.U. Secondary School, Lyamungu	785,000	—	—	785,000
4326	Tanga Secondary School ...	1,312,200	145,800	—	1,458,000
4327	Tarime Secondary School ...	562,000	2,000,000	5,472,000	8,034,000
4328	Mkwawa High School	—	780,000	—	780,000
4329	Old Moshi Secondary School ...	240,000	—	—	240,000
4330	Arusha Secondary School ...	—	—	300,000	300,000
4331	Iringa Girls' Secondary School	805,000	—	—	805,000
4332	Mtwara Secondary School ...	873,000	4,000,000	3,852,000	8,725,000
4333	Sengerema Secondary School ...	3,000,000	3,272,000	1,808,000	8,080,000
4334	Coast Region Secondary School	—	1,000,000	7,710,000	8,710,000
4335	Songea Girls Secondary School	—	—	4,500,000	4,500,000
	Total—Secondary Education	23,377,500	29,502,000	35,362,000	87,241,500

SECTION III—TECHNICAL EDUCATION

1. The unsatisfied demand for engineering technicians and draughtsmen constitutes a serious impediment to development. An effort will be made to make good this deficiency during the period of the Plan by enlarging the facilities at Dar es Salaam Technical College and by building a second Technical College, probably at Mwanza. The estimated cost of these developments is shown in Table VI.

TABLE VI

DEVELOPMENT OF INSTITUTIONS PROVIDING TRAINING FOR ENGINEERING TECHNICIANS AND DRAUGHTSMEN

Code	Institution	Capital cost during Plan (Shs.)
4363	Technical College, Dar es Salaam	1,300,000
4364	Tehnical College, Mwanza	7,000,000

The phasing of the projects is as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4363	Technical College, Dar es Salaam	800,000	500,000	—	1,300,000
4364	Technical College, Mwanza ...	100,000	2,000,000	4,900,000	7,000,000
	Total ...	900,000	2,500,000	4,900,000	8,300,000

SECTION IV—COMMERCIAL EDUCATION

1. The College of Business Education offers training in commercial subjects for middle-level executives in commerce and industry. The College makes a valuable contribution to the economy, but the scale of its operations is limited. Owing to the economic importance of this kind of training, it has been decided to enlarge the scope of operations at the College and to extend the College premises to make this possible. The capital cost of this development is shown in Table VII.

TABLE VII

DEVELOPMENT OF THE COLLEGE OF BUSINESS EDUCATION

Code	Institution	Capital cost during Plan (Shs.)
4362	College of Business Education	730,000

2. Developments at the Dar es Salaam Technical College and the College of Business Education will entail some expansion of facilities for residence and feeding. This will be provided by carrying out alterations to the existing hostel at Dar es Salaam Technical College, yielding 396 extra boarding places, bringing the total to 528; and by modifications to the existing dining accommodation. Provision for these alterations has been included in the capital cost of work at Dar es Salaam Technical College.

Development expenditure on commercial education is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4362	College of Business Education, Dar es Salaam	—	730,000	—	730,000
	Total ...	—	730,000	—	730,000

SECTION V—TRAINING OF TEACHERS

1. The main expansion in the training of teachers will provide for the needs of the primary schools resulting from the expansion envisaged in the Plan. The entry of teachers on courses of pre-service training in preparation for service in primary schools will increase from 1,440 in 1969 to 2,850 in 1974. In addition,

200 places in two Teachers' Colleges will be devoted to courses for the re-training of serving teachers in the new methods and materials, which are being introduced in the course of reorganization of the primary schools to bring them into harmony with the Arusha Declaration.

2. At least two new colleges will be built during the Plan period, three existing colleges will be enlarged and premises will be adapted at former Grade C Colleges and elsewhere to enable Grade D training to be given. The details of the capital investiment involved are given in Table VIII.

TABLE VIII

DEVELOPMENT OF INSTITUTIONS FOR THE TRAINING OF TEACHERS

Code	Institution	Nature of Development	Capital cost during Plan (Shs.)
4335	Songea Teachers' College	Enlargement to 400	2,075,000
4336	Korogwe Teacher's College	Enlargement to 400	6,246,000
4337	Tabora Teachers' College	Enlargement to 400	1,612,000
4340	Katoke Teachers' College	Completion to 240	1,500,000
4341	Butimba Teachers' College	Completion to 400	1,130,000
4342	Dar es Salaam Teachers' College	Hostel and specialist rooms	2,107,000
4338	Kasulu Teachers' College	Adaptations for 180	640,000
4343	Iringa Teachers' College	New College for 360	8,000,000
4344	Mtwara Teachers' College	New College for 400	8,200,000
—	Other premises (to be chosen)	Adaptations for 1[illegible]	940,000

3. If money becomes available, new colleges will be built at Musoma, Singida and Monduli in substitution for uneconomical premises now continuing in use as Teachers' Colleges.

Teachers training programmes is phased as follows:

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4335	Songea Teachers' College	1,038,000	830,000	207,000	2,075,000
4336	Korogwe Teachers' College	2,000,000	3,621,000	625,000	6,246,000
4337	Tabora Teachers' College	—	—	1,612,000	1,612,000
4338	Kasulu Teachers' College	640,000	—	—	640,000
4339	Adaptations to Teachers' College	—	640,000	300,000	940,000
4340	Katoke Teachers' College	572,000	928,000	—	1,500,000
4341	Butimba Teachers' College	1,130,000	—	—	1,130,000
4342	Dar es Salaam Teachers' College	1,500,000	607,000	—	2,107,000
4343	Iringa Teachers' College	2,500,000	4,500,000	1,000,000	8,000,000
4344	Mtwara Teachers' College	—	820,000	7,380,000	8,200,000
	Total—Teachers Training	9,380,000	11,946,000	11,124,000	32,450,000

SECTION VI—UNIVERSITY EDUCATION

1. Whereas the established Faculties of Arts and Social Science, Law and Science at Dar es Salaam will remain approximately at their present level during the Plan period, the new Faculty of Medicine will be expanded stepwise from an intake of 25 in 1969 to an intake of 96 in 1974. In addition, a Faculty of

Agriculture will be started at Morogoro in July, 1969, and a Faculty of Engineering in 1972. Total Tanzania undergraduate enrolments are expected to increase from 1,140 in July, 1969 to about 1,890 in July, 1973.

2. The Faculty of Medicine, which started work in July, 1968, will organize the five year undergraduate course in two sections. The first, lasting for three years, will make use of a new medical block to be erected on the main campus, together with existing biological laboratories and lecture rooms and residential facilities. During the final two years of the course, students will reside at the Muhimbili Hospital and use the existing laboratories and other teaching accommodation at Muhimbili. Meantime, it is planned to establish a polyclinic at Ubungo, near the University campus, for the dual purpose of providing various types of clinical service and at the same time serving as an instructional centre for the Faculty.

3. The Faculty of Agriculture will take over the premises of the present Agricultural College at Morogoro, where the diploma students will be phased out after the intake of 1970 as the undergraduate enrolment develops. Certain modest additions to the Morogoro premises will be necessary, notably, the provision of a new library.

4. Definite Plans for the provision of premises for the Faculty of Engineering await the submission of the report of a special Working Party. It is, however, expected that a substantial part of the work of the Faculty can be carried out in existing premises, notably in those used by the Department of Physics and the Department of Mathematics. The proposed provision for new buildings during the Plan period should be sufficient to meet the needs of the Faculty during the first three years of the course, the fourth year not being reached until the second year of the Third Five-Year Plan.

5. Projects to be carried out on the main campus include a Mathematics building, Science Extension No. 2 (Chemistry) and a radical modification of the residential facilities planned to yield about 600 extra places by the installation of double bunks, some rearrangement of the fittings and some additions to the sanitary accommodation, thus avoiding the necessity of building a new hostel block. Table IX sets out the details of projects and their estimated cost.

TABLE IX

DEVELOPMENT OF THE UNIVERSITY AT DAR ES SALAAM

Code	Location	Project	Capital cost during Plan (Shs.)
4344–47	Faculty of Medicine	Laboratory Block	8,000,000
		Equipment for laboratories	1,810,000
		Conversion of dorms, Muhimbili	500,000
		Polyclinic	2,500,000
4348–54	Faculty of Agriculture	Library	1,000,000
		Initial Book stock	500,000
		Teaching Block	435,000
		Office Block	192,000
		Laboratory equipment	120,000
		Farming equipment	100,000
		Workshop extension	30,000
4355–59	Main campus	Mathematics	1,400,000
		Science Extension No. 2	822,500
		Library conversion	560,000
		Hall of Residence conversion	2,200,000
		Equipment for printing unit	65,000
4360–61 and 5301	Faculty of Engineering	Buildings	4,300,000
		Equipment	3,500,000
		Staff houses	2,250,000
4901	General	Site Supervision	300,000

Construction programme for the expansion of university education is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4344	Faculty of Medicine, Laboratory Block	800,000	4,200,000	3,000,000	8,000,000
4345	Equipment for Faculty of Medicine	—	1,250,000	560,000	1,810,000
4346	Conversion of dormitories, Muhimbili Laboratory Block	500,000	—	—	500,000
4347	University Polyclinic	—	—	2,500,000	2,500,000
4348	Faculty of Agriculture, Library	—	1,000,000	—	1,000,000
4349	Initial book stock, Faculty of Agriculture Library	100,000	100,000	300,000	500,000
4350	Faculty of Agriculture, Teaching Block	—	—	435,000	435,000
4351	Faculty of Agriculture, Office Block	—	192,000	—	192,000
4352	Faculty of Agriculture, Laboratory equipment	60,000	60,000	—	120,000
4353	Faculty of Agriculture, Farming equipment	—	50,000	50,000	100,000
4354	Faculty of Agriculture, Workshop Extension	—	30,000	—	30,000
4355	Mathematics building	—	1,400,000	—	1,400,000
4356	Science Extension No. 2 (Chem.)	—	—	822,500	822,500
4357	Main Library conversion ...	—	560,000	—	560,000
4358	Halls of residence conversion ...	700,000	1,500,000	—	2,200,000
4359	Equipment for Printing Unit ...	65,000	—	—	65,000
4360	Faculty of Engineering Building	—	800,000	3,500,000	4,300,000
4361	Faculty of Engineering Equipment	—	—	3,500,000	3,500,000
5301	Staff Houses	—	—	2,250,000	2,250,000
4901	Site supervision and consultancy	300,000	—	—	300,000
	Total ...	2,525,000	11,142,000	16,917,500	30,584,500

SECTION VII—PUBLIC LIBRARIES AND OTHER PROJECTS

1. The programme for public libraries include the building of branch libraries at Tabora, Morogoro, Mtwara, Arusha, Moshi and Mbeya; the establishment of mobile library services intended to reach rural populations; the establishment of a school library service; and the initial development of certain special library services. The general emphasis of the Tanzania Library Service during the Plan period will be on the extension of services to rural areas, which will include the establishment of a sub-library in certain of the larger villages, which cannot satisfactorily be served by a mobile unit. Further, the establishment of branch libraries in urban centres must be seen not only as providing a library service for urban residents, but also as furnishing the Tanzania Library Service with bases for the provision of mobile services for the rural areas. The capital cost of this programme is shown in Table X.

TABLE X
DEVELOPMENT OF LIBRARY SERVICES

Code	Subject	Capital cost during Plan (Shs.)
5601	Public Libraries	5,000,000

2. Vehicles are an important means of improving the administration of services and exercising effective control. Vehicles will be provided for the use of itenerant teacher educators working on the development and reorganization of primary education in the rural areas. Some 4–5 new vehicles a year will be added to those at the disposal of the Regional and District Administration and about 8 each year will be made available to adult education officers at District level concerned with the development of adult education activities. New vehicles will also be required by new Government schools and Teachers' college envisaged in the Plan.

3. Some funds will be set aside annually for urgent minor works as they arise. These will be minor capital works at existing schools and colleges, which are urgently necessary to enable them to carry on without reduction of intake. For example some schools in Tanzania have old buildings and such buildings may become dangerous or otherwise unusable unless replaced or reconstructed. The minor works fund is intended to enable the Minister to solve such urgent problems as cannot be rectified out of recurrent resources. The resources set aside for "other projects" are set out in Table XI.

TABLE XI

OTHER PROJECTS

Code	Project	Capital cost during Plan (Shs.)
4902	Vehicles	2,848,000
4903	Urgent minor works	2,500,000

5602 Work Oriented Literacy Project.

The project is being undertaken with the assistance of the United Nations Development Programme. The purpose of the project is to organize and implement a work-oriented adult education pilot project closely linked with vocational training, particularly in agriculture, and to train the national counterparts, supervisors and trainers of Literacy teachers in the new approach and techniques of functional literacy. This is a continuing project from the First Five-Year Plan.

The programme of Public Libraries and other projects is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5601	Public Libraries	940,000	985,000	3,075,000	5,000,000
4902	Vehicles	608,000	350,000	1,890,000	2,848,000
4903	Urgent Minor Works	500,000	500,000	1,500,000	2,500,000
5602	Work Oriented Literacy Project	114,000	100,000	—	214,000
	Total ...	2,162,000	1,935,000	6,465,000	10,562,000

SECTION VIII—NATIONAL CULTURE AND ANTIQUITIES DIVISION

The Division will implement the following six projects at a total estimated cost of Shs. 6 million.

5501 *Extension—National Stadium.*

With the increasing number of cultural, sporting activities and other events involving mass gatherings taking place in Dar es Salaam, it is intended to extend the capacity of the existing National Stadium at an estimated cost of Shs. 2 million.

5502 *Regional Museums.*

The importance of a regional museum lies in the fact that every regional museum is different from every other museum. Each regional museum has a role to play in cultural development education and as an attraction for tourists. It is planned to spend Shs. 1·2 million during the Plan period on developing Regional Museums.

5504 *Cultural Centres.*

A sum of Shs. 1·6 million has been allocated for building a Cultural Centre.

5505 *Antiquities Sites.*

It is intended to collect, conserve, preserve and carry out research on the cultural and historical objects of importance to Tanzania. A sum of Shs. 200,000/- has been allocated for this purpose.

5506 *Expansion of the National Museum.*

It is planned to expand the National Museum in Dar es Salaam at an estimated cost of Shs. 839,000/-.

5503 *Site Museums.*

The Ministry aims to build site museums wherever there are important sites as each site museum has its own characteristics which cannot be entirely divorced from its natural surroundings. During the Second Plan, it is proposed to build site museum at Isinnila in Iringa Region and at Kilwa Kisiwani in Mtwara Region. The two museums are estimated to cost Shs. 223,300/-.

The programme of the Division is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5501	Expansion to National Stadium	1,050,000	950,000	—	2,000,000
5502	Regional Museums	—	595,000	595,000	1,190,000
5503	Site Museums	—	120,000	103,300	223,300
5504	Cultural Centre	800,000	800,000	—	1,600,000
5505	Opening up of Antiquities Sites	40,000	40,000	120,000	200,000
5506	Expansion of National Museum	—	614,000	225,000	839,000
	Total—Culture and Antiquities Division ...	1,890,000	3,119,000	1,043,300	6,052,300
	Total—Ministry ...	56,112,500	80,773,000	160,151,800	297,136,300

(ix) MINISTRY OF COMMERCE AND INDUSTRIES

A. *The Ministerial investment programme falls into three sections:—*

SECTION I—MINERAL RESOURCES DIVISION

As a result of a major re-appraisal of mineral policy for the Second Plan, it has been decided to (Volume I pp. 82–93).

(a) put in a vigorous effort to develop such mineral resources as have already been identified for further exploitation.

(b) pursue an aggressive policy of geological survey, exploration and prospecting to identify new ore resources.

(c) encourage mineral based industries; and

(d) encourage co-operatives, local governments and private individuals to exploit the large number of minerals widely scattered in the country.

The following projects for implementation of the above policy have been incorporated in the Second Plan.

2201 *Drawing Office Instrumentation.*

In order to facilitate reproduction and printing of geological maps it is intended to purchase new equipment. Estimated cost is placed at Shs. 81,000/-.

2202 *Laboratory Instrumentation.*

Expansion of work in mining calls for modern equipment. It is intended to purchase some scientific instruments required for laboratory work. Total cost is estimated at Shs. 644,000/-.

2203 *Geological Mapping and Mineral Reconnaissance.*

About 44,000 sq. Kilometres are intended to be covered by geological mapping in the Lupa and West Rift areas. This involves elaborate prospecting and investitions for four years in the Lupa area and geological mapping of West Rift area on a scale of 1:125,000. The areas for investigation have been picked on the assumption of these being most likely to yield quick returns in terms of mineral identification. The project is estimated to cost Shs. 18·5 million.

2204 *Mica Prospecting.*

The project is intended to undertake initial development of mica prospects, assess their value and advise on the best simple method to be applied for mining and treating the material. In conjuction with the prospectors' course, it would also assist in the earlier stage of proper prospecting for mica. Total cost is estimated at Shs. 1·5 million.

2205 *Prospecting in Karagwe.*

Intensive study for about 18 months of the geology, mining and mineral dressing of the deposits of tin and tungsten will be undertaken in Karagwe Region during the Second Five-Year Plan at an estimated cost of Shs. 4·9 million.

4301 *Prospectors' Course.*

Prospectors' courses conducted in the past have been quite successful. It is intended to expand facilities for such courses by adding mobile units at a cost of Shs. 250,800/-. A permanent centre is already established at Morogoro.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
2201	Drawing Office Instrumentation	50,600	30,400	—	81,000
2202	Laboratory Instrumentation ...	644,000	—	—	644,000
2203	Geological Mapping and Mineral Reconnaissance	4,626,400	4,600,000	9,300,000	18,526,400
2204	Mica Prospecting Team ...	240,040	300,000	989,960	1,530,000
2205	Prospecting in Karagwe ...	600,000	800,000	3,510,000	4,910,000
4301	Prospectors' Course	250,800	—	—	250,800
	Total—Mining Division ...	6,411,840	5,730,400	13,799,960	25,942,200

SECTION II—INDUSTRIES DIVISION

Most of the programmes which are the responsibility of this Division are to be implemented through the Parastatals, such as N.D.C., S.T.C., N.S.I.C., etc. For the expanded programme of training workers for small scale and Cottage industries, the following project is planned. It is intended to expand facilities at the Cottage Industries Centre, Dar es Salaam to increase intake for training in different arts and crafts. Additional classroom and hostel facilities are estimated to cost Shs. 1·2 million.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4302	Cottage Industries Centre ...	1,205,040	—	—	1,205,040

SECTION III—RURAL ELECTRIFICATION

During the Second Five-Year Plan, it is intended to expand the extension of electricity supplies in small townships. Serious investigation will also be made for extending electricity into the more densely populated rural areas, and in groups of Ujamaa villages. Shs. 5 million has been allocated for investigations and for subsidizing programmes which are not initially justifiable on strictly commercial grounds.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
3101	Rural Electrification	—	1,000,000	4,000,000	5,000,000
	Total—Ministry ...	7,616,880	6,730,400	17,799,960	32,147,240

B. PARASTATAL PROGRAMMES

SECTION I—TANZANIA ELECTRIC SUPPLY COMPANY (TANESCO)

TANESCO produces most of the electric power in the country. It is estimated that total investment programme of TANESCO during the Plan period would cost Shs. 457 million. The programme has three major aspects:

(1) to carry out its normal extension and modernisation programme: new transmission lines, new generating sets, replacement of old stations. This will ensure the capacity of the coastal up to 68·4 MW and the Moshi/Arusha system, after completion of the Nyumba ya Mungu Power Station, to 15·46 MW.

(2) to undertake the construction of two major dams in order to meet the fast increasing demand in Dar es Salaam and to make possible the industrialization of the Mbeya Region (industries such as cement materials, coal fields, niobium, apatite mines, processing of pulp and timber, wheat mill, electric pumps, etc. are planned).

(3) to implement Government's decision to electrify some small townships

1. The extension programme amounts to Shs. 137 million and concerns mainly the completion of Ubungo Power Station and sub-station, new sets in Mwanza, the Mtwara/Lindi transmission line (allowing for the break-down of the old uneconomic station in Lindi), extensions in Mbeya, Dodoma, Tabora and Moshi/Arusha.

2. After a thorough study of the hydro-electric potentials in the coastal area, the erection of a dam on the Great Ruaha River, near Kidatu has been decided. The first stage estimated to cost Shs. 271 million includes the construction of a concrete dam, a tunnel to convey water to the power station and transmission lines to Chalinze. The initially installed power will be 50 MW in 1973; full capacity being 200 MW (1981).

Preliminary studies have been carried out in the Kiwira River Basin. The natural hydro power potential excluding dam construction is about 74 MW, but TANESCO will initially install a capacity of about 2 MW (Shs. 44 million).

3. Rural electrification would seem rather difficult before serious studies are carried out by the Ministry of Commerce and Industries. But Government's policy is to extend electrification as a tool of development to smaller townships even if it is uneconomic to start with. After Nachingwea, TANESCO intends to electrify small townships. The areas where demand is expected to be 50 to 100 KW are Njombe, Nansio, Geita and Bagamoyo.

TANESCO will invest Shs. 71 million out of its own finances, expects Shs. 212 million from external souces and Shs 174 million from the Government.

The tentative investment programme is as follows:

TANESCO

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Additional 33 kV transmission lines and Sub-Stations ...	2,049,000	1,092,000	5,840,000	8,981,000
Songea project	248,000	—	—	248,000
Mtwara new power station ...	204,000	64,000	—	268,000
Nachingwea new set	8,000	—	—	8,000
Mbeya new set	363,000	187,000	—	550,000
Dodoma new set	255,000	135,000	—	390,000
Tabora new set	255,000	135,000	—	390,000
Electrification of 5 small townships	1,000,000	1,000,000	3,000,000	5,000,000
Ubungo sets 4, 5 & 6	3,948,000	376,000	—	4,324,000
Mwanza sets 4, 5, 6 & 7 ...	1,495,000	126,000	3,300,000	4,921,000
Ubungo Sub-Station	949,000	627,000	3,580,000	5,156,000
Kidatu project	12,987,000	64,532,000	193,250,000	270,760,000
Nyumba ya Mungu Power Station	160,000	—	—	160,000
Mtwara Lindi line	2,800,000	—	—	2,800,000
Kiwira project	2,300,000	11,300,000	30,400,000	44,000,000
Nyumba ya Mungu/Kikuletwa/ Arusha Lines and Sub-stations	84,000	—	—	84,000
Minor H.T. and L.T. Additions	14,572,000	14,535,000	49,600,000	68,707,000
Additional supply for Moshi/ Arusha	—	—	27,400,000	27,400,000
Bridging diesels Dar es Salaam	—	—	12,630,000	12,630,000
Feasibilily study Hale/Nyumba ya Mungu	84,000	—	—	84,000
Feasibility study—irrigation and power at Gonja	67,000	—	—	67,000
Total ...	43,819,000	94,109,000	319,020,000	456,948,000

SECTON II—NATIONAL DEVELOPMENT CORPORATION

With the creation of two new parastatals, the National Agriculture and Food Corporation (NAFCO) and the Tanzania Tourist Corporation (TTC), NDC's activities in the Agriculture and Tourism fields will now be the responsibility of the two Corporations respectively.

After the Parastatal re-organization, National Development Corporation continues to be responsible for manufacturing, processing and mining activities in the public sector. It will continue to engage in activities aimed at exploiting Tanzania's industrial potential and enhance public ownership. NDC's programme is designed at import substitution, processing of locally produced raw materials and establishing export industries.

NDC's intended investment thus includes, a steel rolling mill, a fertilizer plant, textile mills, car tyres and batteries, a barley malting plant, an expansion of the shoe factory, a cement factory, a bicycle factory, an asbestos cement unit, processing of sisal pulp, sisal bags and carpets, sawmills and wood products, canning of fruits, meat and fish, gemstones, salt mines, etc. Some of these projects are already prepared and are ready for implementation while others have yet to be studied in detail from the view point of commercial and economic feasibility. Total intended investment by NDC during the Plan period is estimated at about Shs. 800 million.

This will require about 20 cent per increase in investment per annum—an ambitious yet a feasible target. As NDC is yet not in a position to generate its own resources for an investment of this magnitude, considerable Government contribution will be essential over the plan period.

A tentative list of NDC's proposed projects is placed below:—

PROJECT DESIGNATION	Total Estimated Expenditure 1969/70–1973/74
Tanzania Tanneries	5,245,000
Coastal Dairy Industries	5,066,000
Tanzania Fertilizers Company	112,307,000
Tembo Chipboards Ltd.	5,076,000
Tabora Msitu	1,740,000
Sisal pulp	360,000,000
Steel rolling mill	2,739,000
Tanzania Gemstones	1,000,000
General Tyre E.A.	62,000,000
Kaolin Survey	185,000
Distillery	2,850,000
Cashew processing	600,000
Bicycles	4,250,000
Detergents	2,000,000
Sawmills—development	7,200,000
Kenaf processing	25,000,000
Fruit and Vegetable processing	960,000
Steel diversification	700,000
Salt expansion	3,000,000
Tegry plastics	500,000
Shoe expansion	2,500,000
Asbestos pipes and sheets	22,400,000
Fibreboard—manufacture	18,000,000
Furniture	5,000,000
Bicycle tyres and tubes	6,150,000
Fishery	5,000,000
Parquet flooring	1,000,000
Sisal bags	7,965,000
Starch—manufacture	1,700,000
Sisal carpets	13,000,000
Towels—manufacture	2,500,000
Textiles diversification	12,000,000
Warp knitting stretch fabrics	2,000,000
Steel pipes	10,000,000
Cement expansion	24,000,000
Malting	11,000,000
Car Batteries	2,710,000
I.P.S. Building	12,000,000
Total	780,783,000

SECTION III—NATIONAL SMALL INDUSTRIES CORPORATION (NSIC)

For the Second Five-Year Plan NSIC's programme is aimed at:—

(a) establishment of industrial workshops to be rented to artisans, with a common facilities centre.
(b) organizing common purchases of raw materials and common marketing of finished goods.
(c) participaing in small scale industries.
(d) extending loans for the purchase of machinery or for working capital.
(e) organizing artisans' training.

The investment programme, thus, includes the following projects:

	Estimated Expenditure (Shs.)
A. *Promotional activities.*	
(1) 250 Workshops to be built in Dar es Salaam, Singida Tabora, Usangi, Shinyanga or Mwanza, Rungwe, Tanga, Arusha, Songea, Bukoba	4,435,950
(2) Headquarters	560,550
B. *Commercial activities.*	
(1) Purchase of machinery with special emphasis on up-country units	2,347,800
(2) Share capital participation in selected small industries. It is expected to benefit 9 projects	640,000
(3) Fruit and vegetable preservation projects	660,000
(4) Ancillary industrial projects, especially a wire drawing unit in Tanga	875,000
(5) Loans for small industries	660,000
Total ...	10,205,300

The programme of the Corporation is as follow: —

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Industrial Workshops and facility centres	565,700	2,094,600	1,775,650	4,435,950
Headquarters	56,150	433,400	71,000	560,550
Fruit and Vegetable processing	—	165,000	495,200	660,000
Ancillary units	—	875,000	—	875,000
Total ...	621,850	3,568,000	2,341,650	6,531,500

LENDINGS

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Hire purchase of machinery ...	296,000	470,400	1,608,400	2,374,800
Share capital participation ...	240,000	100,000	300,000	640,000
Loans to small industries ...	65,000	130,000	465,000	660,000
Total ...	601,000	700,400	2,373,400	3,674,800

SECTION IV—THE STATE TRADING CORPORATION (S.T.C.)

The S.T.C. intends to increase the scope of its operations, both domestically and internationally. Wholesaling facilities are to be expanded in the regions and the range of products it handles is expected to increase steadily. It is expected to play an increasingly important role in expanding trade with Eastern Africa and through bilateral arrangements with socialist countries. The domestic effort of the S.T.C. is expected to be supplemented in the regions with the expansion of wholesaling and retailing activities by the Co-operative movement.

This will necessitate the expansion of office and storage facilities. S.T.C. plans to invest about Shs. 20 million in creating these facilities over the Plan period. Its tentative investment programme includes the following projects:

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Unified Business complex, Dar es Salaam	1,750,000	3,500,000	1,750,000	7,000,000
Hides and Skins Warehouse Dar es Salaam	600,000	—	600,000	1,200,000
Extension to Warehouse, Kurasini	900,000	—	—	900,000
New General Storage, Pugu Road	1,000,000	—	500,000	1,500,000
New General Storage, Mwanza	500,000	—	250,000	750,000
New General Storage, Arusha	200,000	—	—	200,000
New General Storage, Tanga	120,000	300,000	600,000	1,020,000
Other Investments	—	3,000,000	3,000,000	6,000,000
New General Storage, Songea	150,000	—	—	150,000
Morogoro new Branch	165,000	35,000	—	200,000
Dodoma new Branch	165,000	35,000	—	200,000
Tabora new Branch	165,000	35,000	—	200,000
Sumbawanga new Branch	165,000	35,000	—	200,000
Naibori Office	50,000	150,000	300,000	500,000
Total	5,930,000	7,090,000	7,000,000	20,020,000

(x) MINISTRY OF COMMUNICATIONS, TRANSPORT AND LABOUR

The strategy for the development of the communication network in Tanzania is fully explained in Chapter VI Volume I of the Second Five-Year Plan. The investment programmes of the Ministry amounting to Shs. 922·4 million is divided into 5 sections.

SECTION I—ROADS AND AERODROMES

The construction of the TanZam Highway over-shadows all other developments in the sector, particularly during the first three years of the Plan. Spending on other communication projects will be less than would otherwise have been desirable because of the heavy spending necessary on the TanZam Highway.

During the First Five-Year Plan, a large emphasis was laid on Trunk Routes. It is expected that a better balance will be achieved during this Plan as between Trunk Routes and Feeder Roads. Increased emphasis has been given to minor feeder roads wherever agricultural potential can be shown and identified.

Total expenditure on roads and aerodromes during the Plan is anticipated to total Shs. 817 million.

4101 *Rwanda Link.*

This project originally planned only for 11 mile link from the Ruhusu falls to the Kimse-Rulege road, has been extended to link up to Nyakahura.

4102 *Mwanza Aerodrome.*

Due to extremely bad ground conditions this project was not completed during 1968/69 as originally planned. Shs. 1·25 million is estimated to be spent during the first year of the Plan to meet the unforeseen additional expense and the delayed payments.

4103 *W.T.R. Bridges.*

This project entails construction of Uvinza, Kibondo and Kyaka bridges. The bridges at Uvinza and Kibondo are expected to be completed and open to traffic by August—September, 1969. Construction of the Kyaka bridge has started and is expected to be completed by June, 1970. Shs. 8·5 million will be spent on this project.

4104 *Uyole-Itungi.*

It is intended to bituminize 71 miles from Uyole to Itungi Port in the Mbeya Region. The works are behind schedule due to unfavourable soil conditions combined with heavy rainfall in the area. The project will be completed during 1969/70 with an expenditure of Shs. 11·5 million.

4105 *Kolondoto-Bariadi.*

It is planned to reconstruct to engineered gravel standard the 91 miles between Kolondoto and Bariadi in the Shinyanga Region. The project is ahead of schedule and expected to be completed in 1969/70. It is also intended to extend the project to include the Bariadi bridge.

4106 *Rural Feeder Roads.*

The project consists of completing the C.A.L. Bridging and A.I.D. culverting programme. This will mainly be in Kigoma, Singida, Morogoro and Mtwara Regious. These works are carried out by direct labour and managed by Regional Engineers of Comworks.

4107 *Dar es Salacm-Tunduma.*

This project will provide a bitumen surface for the road between Dar es Salaam and Lusaka. The Tanzanian section from Tunduma to Morogoro has been divided into three separate sections, one financed by USAID, and the other two by a combination of World Bank and SIDA money. All sectors are under construction and the road will be ready for use in 1971.

4108 *Main Roads in Townships.*

This provision is made for assisting local authorities in financing roads more than 18 feet in width.

In this respect, Shs. 0·2 million is to be spent in 1969/70 on the completion of Nyerere Road in Mwanza.

4109 *Ferries.*

Shs. 1·3 million is expected to be spent on the purchase of a ferry for the Busisi Crossing.

4110 *Nyakanga Bunda.*

It is intended to extend Simiyu bridge since the flow has exceeded expectations and has breached the backfill on two occasions.

4111 *Usagara-Shinyanga.*

This road is to be bitumenized in view of the high levels of traffic at present passing over the road. The work is expected to start in the third year of the Plan and will cost a total of Shs. 40·7 million.

Mwanza-Arusha.

This project consists of two sections:

4112 *Oldeani-Makuyuni (45 miles).*

Which will be bituminezed in order to meet the demands placed upon it by the heavy tourist traffic and transportation of wheat from Mbulu. Actual construction is expected to begin in the second year of the Plan.

4113 *Oldeani-Mwanza (200 miles).*

This section will be of engineered gravel standard from Oldeani to either the Mwanza-Musoma or Mwanza-Shinyanga Road.

4114 *Bukoba-Kyaka.*

This road from Bukoba to the Uganda border carries 178 vehicles per day. It is proposed to be bitumenized late in the plan at a total expenditure during the Plan period of Shs. 10·65 million

4115 *Geita Peninsular Roads.*

These roads service the cotton growing areas of the country and following a favourable consultants' report are expected to be constructed early in the Plan, to varying standards.

4116 *Dar es Salaam Bagamoyo.*

This is another road that has heavy traffic levels at present. This link will be bitumenized late in the Plan period.

4117 *Mtwara-Masasi.*

The road will be bitumenized to enable the cashew crop to be moved at a lower cost than at present and to facilitate the general economic development of the Mtwara hinterland.

4118 *Dar es Salaam-Mtwara (Coastal Route and Shipping).*

The original intention was to build a new trunk road from Dar es Salaam to Mtwara. But, this has been delayed owing to massive allocation of resources to the Tanzania-Zambia road and rail links.

Because of this unavoidable delay it is the government's intention to improve communications to Mtwara through public investment in the improvement of the coastal shipping service between the two ports. A sum of Shs. 10 million has been allocated for this purpose in this Plan.

4119 *Msolwa-Ifakara.*

This road will be up-graded to an engineered gravel standard to help in the development of the Kilombero Valley by providing an all weather, economical access route.

4120 *Burundi Link.*

Shs. 0·1 million is allocated for the continuation of investigations into the the construction of this border road.

4121 *Liganga Access Road.*

It will be constructed to minimum standards early in the Plan to gain access to the iron ore deposits.

4122 *Masasi-Tunduru-Songea.*

The road will be improved where year round access is impossible at present. The work will be carried out with the proposed Betterment Units.

4123 *Lusahunga-Ngara-Rwanda Link.*

An average of Shs. 20,000/- per mile is to be spent for structural improvements on the 80 miles between Lusahunga and Ngara and Shs. 40,000/- per mile on improvement of the 20 miles between Rulenga and the turn-off of the new Rwanda Link at Kasherazi.

The main bottleneck for reliable all-weather communication of Ngara with the rest of the country is the Mumwembo ferry across the Ruvubu River that is closed to heavy vehicles during the wet season. A new bridge is a necessity. A total expenditure of about Shs. 5 million will provide all-weather access to the Ngara District and the new Rwanda Link Road.

4124 *Bukoba-Mulemba-Biharamulo.*

The 100 miles of this project will complete the Bukoba-Mwanza road link. The Lake Service caters for most of the trade between the two centres, but an improved road connection is considered a valuable stimulus to inter-regional integration.

4125 *Uvinza-Mpanda.*

The 125 mile of this road is presently in reasonable condition, but requires some improvement. Consideration will also be given during the Plan to linking Tabora-Mpanda.

4126 *Tunduma-Sumbawanga.*

Further work is required to make this road suitable for the expected wheat shipments.

4127 *Equipment.*

This project consists of the purchase of plant and vehicles to carry out proper maintenance of District roads both those already taken over and those to be taken over in future.

4128 *Minor Feeder Roads.*

These are to be constructed as the result of a Consultants' Study and the work of the District and Regional Development Committees. An average of Shs. 5 million is expected to be spent in every year of the Plan on the projects found worthy by an Interministerial Feeder Roads Board.

4129 *Emergency Bridging.*

Funds for this project are required for repairs caused by sudden floods. Each region is to hold a stock of emergency Bailey Bridging. Funds will, therefore, be spent to bring all regions up to the required holding. The estimated expenditure will be Shs. 3·0 million.

2301 *Surveys and Investigations.*

This is an allocation provided to carry out surveys and investigations on works not otherwise specifically covered and to carry out road, bridge and traffic surveys on works scheduled late in the Plan.

4301 *Training.*

This is a combined World Bank-Tanzania scheme to help develop the skills of local officers with technical training by practical experience and supervision.

4130 *Dar es Salaam Airport Improvements.*

The project is for carrying out minor/interim improvement works at Dar es Salaam Airport. These works are required to improve the terminal and parking facilities for aircrafts to ensure adequacy until 1973. The works are estimated to cost Shs. 6·4 million.

4131 *Kilimanjaro International Airport.*

This airport is to be developed to secure needs of the Moshi/Arusha urban complex, the development of Arusha as an international, commercial and political centre, and the international tourist trade.

Total expenditure is estimated at Shs. 70·0 million of which Shs. 40·0 million will be spent during the first year of the Plan.

4132 *Other Aerodromes.*

East African Airways are carrying out a study to decide on the desirability of serving each East African centre by an Otter or Friendship. Improvements will have to be made in the runways. For this purpose Shs. 5 million have been provided.

4133 *Aerodrome Fire Services.*

The purchase of equipment and fire tenders, and the construction of buildings to enable maintenance of sufficient services to cope with expanding air traffic will continue throughout the Plan period.

4135 *Cotton Roads.*

These roads are financed by the Lint and Seed Marketing Board every year t help unhindered collection of cotton to ginneries. The roads to be worked ar decided upon by the L.S.M.B. Construction is carried out by using direct labour It is expected that Shs. 1·2 million will be spent every year of the Plan on thes roads.

The roads and aerodromes development programme is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4101	Rwanda Link Road	600,000	3,500,000	—	4,100,000
4102	Mwanza Aerodrome	1,250,000	—	—	1,250,000
4103	W.T.R. Bridges	8,500,000	—	—	8,500,000
4104	Uyole-Itungi Road	11,500,000	—	—	11,500,000
4105	Kolondoto-Bariadi Road	9,000,000	—	—	9,000,000
4106	Rural Feeder Roads	5,000,000	—	—	5,000,000
4107	Dar es Salaam-Tunduma Road	151,900,000	175,000,000	67,100,000	394,000,000
4108	Main Roads in Townships	200,000	—	4,800,000	5,000,000
4109	Ferries	1,300,000	—	—	1,300,000
4110	Nyakanga-Bunda Road	200,000	1,600,000	—	1,800,000
4111	Usagara-Shinyanga Road	100,000	1,600,000	39,000,000	40,700,000
4112	Oldeani-Makuyuni Road	1,000,000	—	19,000,000	20,000,000
4113	Oldeani-Mwanza Road	1,500,000	1,500,000	42,000,000	45,000,000
4114	Bukoba-Kyaka Road	—	—	10,650,000	10,650,000
4115	Geita Peninsular Roads	400,000	—	49,800,000	50,200,000
4116	Dar es Salaam-Bagamoyo Road	—	—	10,870,000	10,870,000
4117	Mtwara-Mingoyo-Masasi Road	—	—	27,260,000	27,260,000
4118	Dar es Salaam-Mtwara Road (Coastal Road and Shipping)	1,000,000	9,000,000	—	10,000,000
4119	Msolwa-Ifakara Road	—	—	16,000,000	16,000,000
4120	Burundi Link Road	100,000	—	—	100,000
4121	Liganga Access Road	1,000,000	5,500,000	—	6,500,000
4122	Masasi-Tunduru-Songea Road	—	—	5,600,000	5,600,000
4123	Lushanga-Ngara-Rwanda Link	—	—	5,000,000	5,000,000
4124	Bukoba-Mulemba-Biharamulo Road	—	2,000,000	—	2,000,000
4125	Uvinza-Mpanda Road	—	—	3,000,000	3,000,000
4126	Tunduma-Sumbawanga Road	1,000,000	2,000,000	—	3,000,000
4127	Equipment	5,000,000	10,000,000	25,000,000	40,000,000
4128	Minor Feeder Roads	5,000,000	5,000,000	15,000,000	25,000,000
4129	Emergency Bridging	1,000,000	—	2,000,000	3,000,000
2301	Surveys and Investigations	500,000	500,000	2,000,000	3,000,000
4301	Training	800,000	600,000	2,200,000	3,600,000
4130	Dar es Salaam Airport Improvements	6,000,000	400,000	—	6,400,000
4131	Kilimanjaro Airport	40,000,000	30,000,000	—	70,000,000
4132	Other Aerodromes	—	—	5,000,000	5,000,000
4133	A.F.S.	730,000	1,270,000	3,800,000	5,800,000
4134	Southern Border Feeder Roads	9,000,000	—	—	9,000,000
4135	Cotton Roads	1,200,000	1,200,000	3,600,000	6,000,000
	Total—Roads and Aerodromes	264,780,000	250,670,000	358,680,000	874,130,000
	Expected Spill-over to the next Plan	—	—	57,130,000	57,130,000
	Net Total—Roads and Aerodromes	264,780,000	250,670,000	301,550,000	817,000,000

The Building Division of the Ministry is responsible for providing office and housing accommodation for the Government. It also undertakes construction works on behalf of other ministries. All the projects to be implemented by this Division are for the provision of housing and office accommodation. Works on behalf of other ministries include design, preparation and administration of contracts and in some cases, direct labour construction works. The Division is expected to undertake construction of offices and housing accommodation amounting to about Shs. 86·5 million during the Plan period.

4901–2 *Regional and District Office Blocks.*

During the Plan, it is proposed to construct six new Regional Office Blocks and to provide new district offices in five districts. Regional office blocks are planned for construction at Tanga, Mbeya, Morogoro, Dodoma, Tabora and Kibaha. District office blocks will be constructed at Mbinga, Mbulu, Mpwapwa, Mbozi and Mufindi.

4903 *Parliament Building, Dar es Salaam.*

A new parliament building, which can cater for the increased number of members of parliament, is proposed to be started in the fourth year of the Plan. This will be located at Mnazi Mmoja and is estimated to cost about Shs. 24 million, 10·2 million of which will be spent during the Plan period.

4904 *Government Offices, Dar es Salaam.*

In order to accommodate as many ministries as possible in Government owned premises, it is intended to construct two new office blocks.

5301 *Government Housing Programme "A" and "B".*

It is planned to build about 100 new Grade "A" and 250 "B" Government quarters during the Plan period.

5302 *SIDA Housing, Dar es Salaam.*

This housing project is intended to provide adequate accommodation for staff loaned to Tanzania under various technical assistance programmes. The project was started during the First Plan and provision is now made for completion of fifty-five houses.

5303 *U.N. Housing, Dar es Salaam.*

It is proposed to build 30 units with the financial assistance of U.N., for providing housing facilities to experts not entitled to housing.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditur 1969/70–1973/74
4901	Regional Office Blocks... ...	1,100,000	1,700,000	6,600,000	9,400,00
4902	District Office Blocks	300,000	500,000	1,400,000	2,200,00
4903	Parliament Building, D'Salaam	—	—	10,200,000	10,200,00
4904	Government Offices, D'Salaam	6,500,000	2,500,000	6,000,000	15,000,00
5301	Government Housing Programme "A" and "B"	1,000,000	3,000,000	16,000,000	20,000,00
5302	SIDA Housing	380,000	—	—	380,00
5303	U.N. Housing	1,500,000	1,500,000	—	3,000,00
4905	N.I.P. Building	350,000	—	—	350,00
4906	N.P.F. Building Annexe' Dar es Salaam	—	—	2,000,000	2,000,00
4907	Regional Provident Fund Offices	375,000	300,000	900,000	1,575,00
4908	Employment Service Office, Dar es Salaam	—	—	600,000	600,00
4909	Employment Service Office—Dodoma	—	—	300,000	300,00
4910	Employment Service Office, Moshi	—	—	140,000	140,00
4911	Modifications to Exist. Empl. Service, Office...	—	—	400,000	400,00
4912	Extensions to Employment Services, National	—	—	255,000	255,00
4913	New Mapping Building—Land-survey	—	100,000	4,480,000	4,580,00
4914	National Archives Building—Second Vice-President's Office	—	500,000	863,500	1,363,500
4201	Record Management Centre—Second Vice-President's Office	—	100,000	460,000	560,000
6403	Judiciary Buildings, Courts ...	1,200,000	1,200,000	2,400,000	4,800,000
4915	Border Posts—Treasury ...	300,000	—	—	300,000
4916	State Lodges—President's Office	1,426,751	2,790,467	3,720,553	7,937,771
4206	Radio Tanzania Office and Studios—Maelezo	—	—	1,160,000	1,160,000
	Total—Building Division ...	14,431,751	14,190,467	57,879,053	86,501,271

SECTION III—LABOUR DIVISION

Labour Division plans at expanding the employment exchange system to b designated as the National Employment Service will require additional investmen in new office accommodation. Existing accommodation in the field is also to b improved by extension or by building new offices.

Employment Service Offices.

It is proposed to expand the present Labour Office in Dar es Salaam in orde to provide accommodation for additional staff needed for the expanded employ-ment programme. A new block will cost Shs. 600,000/-.

A new type "A" Labour office will also be built in Dodoma costin Shs. 300,000/-.

A functionally designed modern Labour Office suitably located in the growing industrial zone is proposed for Moshi. Total capital expenditure wil be Shs. 140,000/-.

The present Dar es Salaam office is inadequate to meet the needs of workers required by the Dar es Salaam Harbour and expanding Industrial centre. Therefore, a small sub-office will be built in the vicinity of each of these areas. Each sub-office will cost Shs. 125,000/-.

An amount of Shs. 400,000/- has also been set aside for alteration and extensions to existing offices. In particular, the expanded National Employment Service and factories Inspectorate will create the need for small additions in regional offices.

The total programme will cost Shs. 1,695,000/-. These projects are included under the programme of the Building Division. (Code 4908-12).

4302 *National Industrial Training Scheme.*

This scheme replaces the Government Trade Schools which finally ceased craft training of apprentices in 1967. By the agreement signed in June, 1968 I.L.O. and U.N.D.P. are actively involved in the training programme for the next five years.

It is estimated that the project will cost a total of Shs. 1,700,000/- mostly for the construction of workshops and a new hostel.

National Institute for Productivity—Building.

This is a continuing project from the first Plan. The original project was expanded from two floor office building to a four floor office building so as to provide extra space for the National Development Finance Corporation.

The building is expected to be completed in 1969/70 at an additional cost of Shs. 350,000/-. (Under Housing Division Code 4905).

National Provident Fund.

During the Plan it is proposed to expand the present social security measures and introduce new ones. In order to accommodate the increased staff which will be needed for the administration of these schemes, it is proposed to erect a five storey annexe to the N.P.F. building along Titi Street in Dar es Salaam at a cost of Shs. 2,000,000/-. In addition to these, Regional Provident Fund Offices are proposed to be erected in West Lake, Singida, Iringa, Mara, Kilimanjaro, Mwanza, Arusha, Tanga and Mbeya regions at an estimated cost of Shs. 1,575,000/-. (Under Housing Division Codes 4906 and 4907).

4917 *Transport Equipment (National Provident Fund).*

Nine new field offices of the National Provident Fund will be opened during the Plan period. The opening of new field offices and extension of the Fund's coverage to new categories of employers, employees and self-employed persons will necessitate increased transport facilities particularly for the field staff. It is intended, therefore, to purchase 12 motor vehicles at a total cost of Shs. 192,000/-.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4302	National Industrial Training Scheme	—	500,000	1,200,000	1,700,000
4917	Provident Fund Transport ...	48,000	48,000	96,000	192,000
	Total—Labour ...	48,000	548,000	1,296,000	1,892,000

SECTION IV—GOVERNMENT STORES DIVISION

4801 *Government Stores Depots and Workshops.*

With the introduction of Urwick Orr Scheme Comworks services all Ministries. Though work load has increased manifold, accommodation has virtually remained the same.

In order to combat this situation, a programme has been worked out to extend and improve most of the existing workshops.

The increase in the tempo of development activities of all ministries and departments demands increased services from Government Stores. Therefore, the storage capacity of existing depots as well as handling capacity of wharf units will be increased. Some new depots to serve the regions will also be established.

The whole programme of extension and improvements to Government Stores, depots and workshops will involve an estimated cost of Shs. 13,800,000/-.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4801	Government Stores, Depots and Workshops	2,000,000	2,500,000	9,300,000	13,800,000
	Total—Government Stores ...	2,000,000	2,500,000	9,300,000	13,800,000

SECTION V—AVIATION DIVISION

4203 *Government Aircraft.*

It is proposed to purchase for the Air Survey Division a sixteen seater aircraft with short take-off and landing performance, capable of carrying larger parties to the country's outlying districts using the existing small airfields. The cost of this aircraft will be Shs. 3,166,000/-.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4203	**Purchase of Aircraft**	—	—	3,166,000	3,166,000
	Total—Aviation ...	—	—	3,166,000	3,166,000
	Total—Ministry ...	281,259,751	267,908,467	373,191,053	922,359,271

(xi) THE MINISTRY OF LANDS, HOUSING AND URBAN DEVELOPMENT

A planned growth of urban areas is the major responsibility of this Ministry. Ministry's development programme falls into five sections:

SECTION I—LAND DIVISION

The major responsibility of the Division is the provision of industrial and residential sites in urban areas. In the rural areas the Division will continue to register titles to land occupied by Ujamaa Villages and State Farms, and ensure availability of land for resettlement of people from over-populated areas. The modernisation of existing land tenure systems is also the responsibility of this Division.

The Division will play an important role in the implementation of the Dar es Salaam Master Plan by providing adequate drainage for industrial and residential plots. Apart from the Capital, development of 9 other urban centres is to be emphasized. The Division will spend about Shs. 46 million in the course of the Plan on the following projects.

4901 *Site Clearance and Servicing.*

This project estimated cost to about Shs. 32.1 million is intended to provide residential and industrial plots in Dar es Salaam and in nine other urban towns, namely Arusha, Moshi, Tanga, Dodoma, Tabora, Mwanza, Mtwara, Mbeya and Morogoro. The project also includes the provision of access roads in the above areas

4902 *Provision of Residential Plots—Dar es Salaam Master Plan.*

In order to meet the anticipated increase in demand for housing in Dar es Salaam for about 180,000 people in 1969/74, it is intended to provide at least 25,000 plots at the rate of 5,000 per year. Plots are planned in Kijito Nyama, Tabata, Sinza, Old Airfield and the south of the Ubungo industrial area. By providing the squatters with well serviced plots in "urban ujamaa settlements" in the new areas, it is hoped to alleviate the squatter problem in the City. The project is estimated to cost over Shs. 7 million.

4903 *Provision of Plots—Arusha Master Plan.*

A sum of Shs. 64 million has been earmarked for site, clearance in Arusha for implementing the Arusha Master Plan. The specific areas to be cleared have not been delineated. The money will be spent on land acquisition, compensation and clearance for residential, industrial and road purposes.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4901	Site Clearance and Servicing ...	5,030,500	7,349,500	19,745,000	32,125,000
4902	Provision of Residential Plots Dar es Salaam Master Plan ...	2,305,000	1,025,000*	3,745,000	7,075,000
4903	Provision of Plots Arusha Master Plan	1,600,000	1,300,000	3,490,000	6,390,000
	Total—The Division	8,935,500	9,674,500	26,980,000	45,590,000

SECTION II—SURVEY AND MAPPING DIVISION

The Division is concerned with providing essential services, in mapping and survey which are required for the effective implementation of the Plan in many sectors. In the Second Plan, the Division will improve and expand these services particularly with regard to rural development.

During this period, medium scale mapping will continue with technical assistance where necessary, particularly in areas where rapid development following new roads, railways and flood control, etc. is anticipated. At the same time the Division will expand its mapping services in order to move towards self-sufficiency. Regional survey services will also be expanded to assist in numerous ways in rural and urban development programmes, and specifically in the lay-out of Ujamaa Villages. As a long term policy it is intended to cover all Tanzania with a network of survey reference marks which are essential for co-ordinated engineering and mapping works. The development programme for the Division is estimated to cost over Shs. 27 million.

2301 *Geodetic Surveys.*

This is a project which aims at providing heighted marks throughout Tanzania for use in water, agricultural mapping and engineering projects. Part of this work was carried out in the Three-Year Plan, part is currently in hand and in the next five years period, it is proposed to undertake 1,250 kilometre of levelling in order to link the two previous projects and tie up with Kenya and Zambia. The project is estimated to cost Shs. 800,000/-.

2302 *Topographical Surveys.*

This is a countinuing project which aims to provide marks for use in all forms of developments. The work proposed for immediate future, is the completion of a project started but not finished in the Wami Valley and on the South-East of Lake Victoria and also the survey of the South-Western part of Tanzania where future development following the new roads, railways, etc., is expected to take place. The total cost of the project is estimated at Shs. 23·5 million.

2201 *New Mapping Equipment.*

Equipment costing about Shs. 1·4 million will be acquired during the five year period in order to be self-reliant in this field and with the aim of increasing the mapping services throughout the country.

2303 *Expansion of Regional Survey Services.*

In order to meet the increasing demand for mapping services throughout the country, it is intended to expand services on the Regions. To achieve this, existing regional offices will be enlarged and new offices opened. The programme also includes purchase of vehicles and modern equipment in order to increase efficiency. The project is estimated to cost Shs. 1·5 million

4301 *Expansion of Survey Training Centre, Dar es Salaam.*

The project entails expansion of the existing Survey Training Centre which trains survey technicians in order to cater for the training of Planning Assistants and Land Assistants. Expansion of training facilities is, therefore, aimed at providing the urgently required cadres of Land Technicians in the Ministry. Total estimated cost is Shs. 260,000/-.

Mapping Building.

The expansion in mapping services has necessiated the expansion of the present facilities. The new building costing about Shs. 4,580,000/- is intended to provide proper accommodation for this Division, which at present is located in unsuitable buildings.

The project is included under the Building Division of Comworks. (Code 4913).

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
2301	Geodetic Surveys	100,000	100,000	600,000	800,000
2302	Topographical Surveys ...	4,700,000	4,700,000	14,100,000	23,500,000
2201	New Mapping Equipment ...	—	—	1,400,000	1,400,000
2303	Expansion of Regional Survey Services	200,000	350,000	975,000	1,525,000
4301	Expansion of Survey Training, Dar es Salaam	20,000	240,000	—	260,000
	Total—Survey and Mapping Division	5,020,000	5,390,000	17,075,000	27,485,000

SECTION III—TOWN PLANNING DIVISION

Proper physical planning of urban areas and rural settlements is an important aspect in the nation's development. The Town Planning Division is responsible for controlling the development of urban areas and in assisting in the planning of Ujamaa Villages in rural areas. The programmes of the Division are therefore designed to:

(a) ensure the orderly growth of urban centres assigned high priority for development. This will involve providing adequate economic infrastructure in urban areas, especially in Dar es Salaam and Arusha.

(b) provide services in association with the Survey Division for the physical planning and lay-out of Ujamaa Villages in the rural areas.

(c) link these two types of development by planning for the growth of urban ujamaa settlements in the outlying parts of towns.

4905 *Arusha Economic Infrastructure.*

The project is estimated to cost about Shs. 9·9 million. It involves providing basic infrastructure, land compensation and clearance, surface water drainage, water supply, sewerage and roads, and local costs of the Master Plan. The rapid expansion of the town and the establishment of the East African Community necessitates an early implementation.

Major roads will include a new permanent bridge across the Themi River to give better access between the E.A.C. HQs office area and the residential area; Boma Road, Russel Road, Simeon, Churchill and Wachagga Street extension and a new southern ring road including two bridges.

Acquisition and clearing of land for several purposes will be effected under the project 4903 of Land Division.

4906 *Dar es Salaam Master Plan.*

The project, costing about 70 million shillings is for the provision of basic infrastructure in Dar es Salaam i.e. land for building purposes, including local drainage, roads, etc., new roads and improvement of existing main roads and new collector roads to reach residential and industrial areas.

The main residentials areas to be developed are on Morogoro Road, Kijito Nyama, Tabata East and West areas.

Industrial layouts are planned for Vingunguti (Pugu Road) and extension of the Kurasini area behind the new deep water berths.

Certain aspects of the infrastructure namely water supply and sewerage will be carried out under the projects of the Water and Drainage Division and the provision of land will be carried out by Land Division.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4905	Provision of Economic Infra-structure, Arusha	2,400,000	1,700,000	5,810,000	9,910,000
4906	Provision of Economic Infra-structure, Dar es Salaam ...	7,000,000	15,000,000	48,000,000	70,000,000
	Total for the Division ...	9,400,000	16,700,000	53,810,000	79,910,000

SECTION IV—VALUATION DIVISION

During the plan the Valuation Division will concentrate on those aspects of its work that are connected with taxation; estate duty, Stamp Duty, local rate and land rent. These depend entirely on valuation of land and buildings.

In order to expand "Valuation Services" and increase their effectiveness, especially in respect of revaluation of land and buildings, it is proposed to decentralize the present facilities concentrated in Dar es Salaam so that valuations can be undertaken in the regions also. It is planned to open five zonal offices which will make it possible to supervise Government expenditure on land and buildings and expand valuation services.

4904 *Equipment for Regional Offices.*

Equipment costing about Shs. 196,500/- will be required for the Regional Offices during the five year period.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4904	Equipment for Regional Offices	—	101,700	67,800	169,500

SECTION V—WATER AND DRAINAGE DIVISION

The Division is responsible for the supply of water in urban areas and provision of sewerage and industrial effluent disposal and storm water drainage.

During the Second Five-Year Plan, the Division will concentrate its development works in nine major towns and in Dar es Salaam. This does not mean that the remaining towns and settlements will be neglected. Particularly, in the field of urban water supply it is the intention to maintain everywhere the existing standard of service and to introduce the necessary improvements and extensions.

A special feature of the new Plan is the introduction of serviced Plots. From the public health point of view an ideal Serviced Plot means a plot to which water supply is laid and connected, and which is connected to a public sewer. A number of these plots, particularly those intended for the individual or co-operative house construction, will be provided with a water borne toilet and a shower room.

At this stage it is necessary to mention that water supplied to serviced Plots will be expected to pay for the consumed water, and to pay a sewage disposal charge based on the quantity of water consumed. These charges will cover costs of the operation of these services.

The division expects to carry out further improvements in urban water supplies and a further development of sewerage in urban areas. New industrial areas will continue to be provided with the industrial effluent disposal systems.

3301 *Lower Ruvu Scheme.*

This is a major development project for Dar es Salaam Water Supply. It includes the construction of a new source located on Ruvu River approximately 8 miles south of Bagamoyo, water treatment plant for 26 million gallons per day, pumping station, rising main reservoirs and distribution system. The project is estimated to cost Shs. 98 million. Shs. 32 million has been provided for the Plan period.

This new project, together with the extensive development of the existing waterworks in progress at present, is expected to provide adequate quantity of very good water for Dar es Salaam until 1979.

3302 *Urban Water Supplies and Drainage.*

This project incorporates development projects for 94 urban water supplies, main drainage projects which are continuing from the First Five-Year Plan at Arusha and Mwanza and the development of Serviced Plots. The project is estimated to cost Shs. 114 million during the Plan period.

4907 *Industrial Effluent Disposal.*

This project is intended to provide essential sanitary services in industrial areas.

The principal objective is to provide for the Industrial effluent disposal, and where essential a storm water drainage.

The project includes servicing of Nyakato Industrial Area at Mwanza, Pugu Road Industrial Area in Dar es Salaam, and any other industrial area which will have to be developed during the Plan period.

Plan provision for this project is Shs. 10,500,000/-

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
4907	Industrial Effluent Disposal ...	3,500,000	3,500,000	3,500,000	10,500,000
3301	Lower Ruvu Scheme	—	5,000,000	27,000,000	32,000,000
3302	Urban Water Supplies and Drainage	18,200,000	20,900,000	74,900,000	114,000,000
	Total—Water Division ...	21,700,000	29,400,000	105,400,000	156,500,000
	Total—Ministry ...	45,055,500	61,266,200	203,332,300	309,654,500

B. PARASTATAL PROGRAMME

SECTION I—NATIONAL HOUSING CORPORATION (N.H.C.)

So far N.H.C. has concentrated efforts on house construction under slum clearance schemes. This resulted in a very small net increase in housing accommodation. The new Government policy on housing, as explained in Chapter XIII of Volume I, aims at embarking on an ambitious scheme of site and service development. N.H.C., therefore, has plans to lay down plots and provide basic facilities for some 25,000 plots during the Plan period. Actual construction is, however, to be left to individual or group effort of the future residents. Site and service facilities include water, drainage and foundations. Anticipated expenditure on site development in urban areas, by N.H.C. may amount to Shs. 68 million over the Five-Year period.

N.H.C. will also continue to build medium and low-cost houses. The low-cost range from Shs. 6,000/- to 11,000/- and medium cost from Shs. 11,000/- to Shs. 35,000/-. N.H.C. plans to construct about 2,000 low cost houses per annum. While Government will finance the construction of low-cost houses finance for medium cost houses is expected to flow from the Permanent Housing Finance Company. Total expenditure on house construction during the Plan period may amount to over Shs. 70 million on low-cost houses and about Shs. 125 million on medium cost houses.

During the first Plan N.H.C. has built up considerable construction capacity for low cost and medium cost construction activity. It is envisaged that this capacity will be further enhanced and that N.H.C. will be able to use its organization and capacity in constructing some other Government buildings such as Police Stations and housing for Police.

Under the recent parastatal re-organization, the National Property Development and Management Company, (NPDMC) has been transferred from the N.D.C. to N.H.C. The NPDMC plans to invest Shs. 15 million in Dar es Salaam for constructing office and apartment buildings.

N.H.C.'s anticipated investment programme during the Plan period may be summarized as follows:

	Project Designation	*Anticipated Capital Expenditure Mn. Shs.*
1.	10,000 minimum standard houses	70
2.	5,000 medium standard houses	125
3.	Site and Service schemes	68
4.	N.P.D.M.C.—Dar Club Site	15
	Total	278

The medium cost housing will be constructed only in Dar es Salaam, Arusha, Morogoro and Dodoma.

The following is the tentative breakdown of minimum standard houses:—

Region	*Town*	*No. of Units*
ARUSHA	Arusha	600
	Mbulu	50
	Babati	50
COAST	Dar es Salaam	5,000
	Kisarawe Bagamoyo Rufiji	200
DODOMA	Dodoma	250
	Mpwapwa Kondoa Kongwa	100
IRINGA	Iringa	100
	Njombe	50
KIGOMA	Kigoma	50
KILIMAJARO	Moshi	150
	Same	50
MARA	Musoma	50
	Tarime	50
	Bunda	50
MBEYA	Mbeya	350
	Mbozi	50
MOROGORO	Morogoro	350
MTWARA	Mtwara	350
	Lindi	100
	Nachingwea	50
MWANZA	Mwanza	600
	Kwimba	50
	Nansio	50
RUVUMA	Songea	50
	Tunduru	50
SHINYANGA	Shinyanga	100
	Kahama	50
	Maswa	50
SINGIDA	Singida	100
	Manyoni	50
TABORA	Tabora	250
	Nzega	50
TANGA	Tanga	100
	Handeni Pangani Muheza	200
WEST LAKE	Bukoba	150
	Karagwe	50

The investment programme is phased as follows: —

PROJECT DESIGNATION	Estimated Expenditure 1969/70	Total Estimated Expenditure 1969/70 1973/74
Low Cost Houses	16,250,000	70,000,000
Medium Cost Houses	10,000,000	125,000,000
Site and Service Scheme ...	1,250,000	68,000,000
Dar es Salaam Club Site ...		15,000,000
Total ...	27,500,000	278,000,000

SECTION II—MWANANCHI ENGINEERING AND CONSTRUCTION CO. (MECCO)

M.E.C.C.O., a subsidiary of N.D.C. until the recent parastatal re-organization, has become on independent parastatal with Landsurvey as its parent Ministry.

The over-all development programme involves very high construction activity. Government therefore plans to enhance the capacity of the construction industry in the Parastatal Sector and encourage its development in general. M.E.C.C.O., therefore, will have good expansion possibilities. No concrete plans for M.E.C.C.O.'s expansion have yet been worked out. However, considerable investment by M.E.C.C.O. is anticipated during the Plan period.

(xii) MINISTRY OF HOME AFFAIRS

SECTION I—POLICE

The Ministry aims at strengthening the police force further, and increasing its capacity to maintain law and order throughout the country effectively and efficiently. Due to financial constraints, it is intended to concentrate efforts in building new Police Stations and Quarters, and providing equipment and transport in most needy arears. Standards of most buildings have been reduced to National Housing Corporation's specifications for medium cost housing. This will permit a bigger programme within given resources. Economies have also been achieved in the use of equipment and transport. It is envisaged to spend Shs. 58,400,000/- on this programme during the Plan period.

A new feature of the Development Programme is the "Stock Theft Prevention Unit". This unit will be equipped to render more effective control and prompt service against cattle theft. Areas of concentration will be Mara, Shinyanga and Arusha Regions.

MINISTRY OF HOME AFFAIRS (POLICE)

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
6201	Loliondo Police Station, Arusha	950,000	—	—	950,000
6202	F.F.U., Mainland*	—	920,000	2,340,000	3,260,000
6203	F.F.U., Kigoma	2,830,000	—	—	2,830,000
6204	Marine Unit Headquarters/Slipway/Workshop	—	2,730,000	—	2,730,000
6205	S.T.P.U. Bariadi, Shinyanga†	—	—	1,210,000	1,210,000
6206	S.T.P.U. Mgumu, Mara	1,210,000	—	—	1,210,000
6207	Fire Station—Rank and File Quarters	—	—	1,100,000	1,100,000
6208	Masasi Police Station, Mtwara	—	—	740,000	740,000
6209	Kyela Police Station, Mbeya	—	—	950,000	950,000
6210	Newala Police Station, Mtwara	—	—	950,000	950,000
6211	F.F.U., Arusha	—	—	3,000,000	3,000,000
6212	F.F.U., Pemba	—	—	2,340,000	2,340,000
6213	Kyaka Police Station, Bukoba	—	—	1,050,000	1,050,000
6214	S.T.P.U. Nyantire, Mara	—	—	1,210,000	1,210,000
6215	Mtandikeni Police Station, Tanga	—	—	950,000	950,000
6216	Kigoma Police Station, Lines, Kigoma	—	—	1,750,000	1,750,000
6217	Mwese Police Station, Tabora	—	—	950,000	950,000
6218	Kakonko Police Station, Kigoma	—	—	750,000	750,000
6219	Itumba Police Station, Mbeya	—	—	800,000	800,000
6220	Tarakea Police Station, Moshi	—	—	810,000	810,000
6221	Mafia Police Station, Coast	—	—	1,010,000	1,010,000
6222	Wete Police Station—Flats, Zanzibar	—	—	664,000	664,000
6223	Police Quarters, Iringa	—	—	1,010,000	1,010,000
6224	Upanga Police Station and Lines, Coast	—	—	2,000,000	2,000,000
6225	Kinondoni Police Station and Lines, Coast	—	—	1,086,000	1,086,000
6226	Mahuta Police Station, Mtwara	—	—	950,000	950,000
6227	Shinyanga Police Station and Lines	—	—	1,670,000	1,670,000
6228	Police Station, Tanga	—	—	750,000	750,000
6229	Minor Works	200,000	250,000	870,000	1,320,000
6230	Vehicles	—	500,000	4,000,000	4,500,000
6231	Boats	—	—	6,200,000	6,200,000
6232	Aircrafts	—	600,000	1,400,000	2,000,000
6233	Radios	200,000	700,000	600,000	1,500,000
6234	Stores	—	100,000	4,100,000	4,200,000
	Total	5,390,000	5,800,000	47,210,000	58,400,000

*F.F.U.=Field Force Unit.

†S.T.P.U.=Stock Theft Prevention Unit.

SECTION II—PRISONS

The Development Programme of the Division centres around improvements to prison buildings, provision of water and electricity supply. This is aimed at increasing the security of existing prisons. Housing Prison staff adequately cotinues to be the problem even though considerable progress was made in the last Development Plan. More staff quarters will, therefore, be built during the Plan period to alleviate accommodation problems.

Prisons farming programme made considerable progress during the First Plan. It is intended to intensify the programme further during the Second Plan and start other economic activities including Vocational training. Present Prison farms will be expanded and new ones are planned to be opened.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
1301	Ubena Prison Farm	100,000	—	—	100,000
1302	Bukoba Tea Scheme	180,000	—	—	180,000
1401	Urambo Tobacco Farm ...	169,000	500,000	140,000	809,000
1303	Sumbawanga Prison Farm ...	500,000	537,500	—	1,037,500
1304	Songwe Prison Farm	450,000	600,000	—	1,050,000
1305	Mbigiri Rice Scheme, Wami ...	350,000	—	—	350,000
1306	Arusha Wheat Scheme... ...	50,000	—	—	50,000
6301	Staff Quarters, Songwe ...	120,000	—	400,000	520,000
6302	Staff Quarters, Kigoma ...	120,000	—	110,000	230,000
6303	Staff Quarters, Sumbawanga ...	120,000	—	400,000	520,000
6304	Staff Quarters, Urambo ...	120,000	—	460,000	580,000
6305	Staff Quarters, Kahama ...	120,000	—	—	120,000
6306	Staff Quarters, Kitengule ...	—	100,000	110,000	210,000
6307	Staff Quarters, Lindi	—	100,000	—	100,000
6308	Staff Quarters, Songea ...	—	100,000	—	100,000
6309	Staff Quarters, Ubena	—	100,000	—	100,000
6310	Staff Quarters, Bagamoyo ...	—	100,000	—	100,000
6311	Staff Quarters, Urambo ...	—	100,000	—	100,000
6312	Staff Quarters, Kiabakari ...	—	—	30,000	30,000
6313	Staff Quarters, Mwanza ...	—	—	275,000	275,000
6314	Staff Quarters, Mafia	—	—	355,000	355,000
6315	Staff Quarters, Shinyanga ...	—	—	80,000	80,000
6316	Staff Quarters, Ukonga... ...	—	—	100,000	100,000
6317	Prison Buildings, Bagamoyo ...	—	554,500	—	554,500
6318	Prison Buildings, Tunduru ...	—	40,000	—	40,000
6319	Prison Buildings, Tabora ...	—	40,000	—	40,000
6320	Prison Buildings P.T. College, Ukonga	—	40,000	—	40,000
6321	Prison Buildings, Iringa ...	—	—	700,000	700,000
6322	Prison Buildings, Sumbawanga	—	—	150,000	150,000
6323	Prison Buildings, Songwe ...	—	—	180,000	180,000
6324	Prison Buildings, Mafia ...	—	—	25,000	25,000
6325	Prison Buildings, Arusha—Olmotonyi	—	—	25,000	25,000
6326	Prison Buildings, Maswa ...	—	—	20,000	20,000
6327	Prison Buildings, Kasulu ...	—	—	20,000	20,000
6328	Prison Buildings, Tanga ...	—	—	45,000	45,000
6329	Prison Buildings, Kiabakari ...	—	—	25,000	25,000
6330	Prison Buildings, Mara ...	—	—	25,000	25,000
6331	Prison Buildings Utete ...	—	—	150,000	150,000
6332	Electrification, Kingolwira ...	6,000	—	—	6,000
6333	Electrification, Morogoro ...	6,000	—	—	6,000
6334	Electrification, Mwanza ...	7,000	—	25,000	32,000
6335	Electrification, Musoma ...	6,000	—	25,000	31,000
6336	Electrification, Malya	—	16,000	—	16,000
6337	Electrification, Sumbawanga ...	—	—	100,000	100,000
6338	Electrification, Songwe... ...	—	—	100,000	100,000
6339	Electrification, Kigoma ...	—	—	23,000	23,000
6340	Electrification, Ubena	—	—	22,000	22,000
6341	Electrification, Kitengule ...	—	—	40,000	40,000
6342	Water and Sanitation, Tunduru	5,000	—	—	5,000
6343	Water and Sanitation, Kingolwira	5,000	—	40,000	45,000
6344	Water and Sanitation, Tukuyu...	6,000	—	—	6,000
6345	Water and Sanitation, Arusha-Olmotonyi	—	20,000	—	20,000
6346	Water and Sanitation, Mahenge	—	—	40,000	40,000
6347	Water and Sanitation, Same ...	—	—	25,000	25,000
6348	Water and Sanitation, Singida	—	—	15,000	15,000
6349	Water and Sanitation, Shinyanga	—	—	15,000	15,000

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
6350	Building Improvements, Kilosa	20,000	—	—	20,000
6351	Building Improvements, Biharamulo	20,000	—	—	20,000
6352	Building Improvements, Ngara	20,000	—	—	20,000
6353	Vehicles, Kitengule	—	26,000	—	26,000
6354	Vehicles, Morogoro	—	26,000	—	26,000
6355	Vehicles, Kiabakari	—	—	26,000	26,000
6356	Special Equipment, Sumbawanga	—	—	15,000	15,000
6357	Special Equipment, Songwe ...	—	—	15,000	15,000
6358	Special Equipment, Kigoma ...	—	—	77,000	77,000
6359	Special Equipment, Ilagala ...	—	—	5,000	5,000
6360	Special Equipment, Musoma ...	—	—	23,000	23,000
6361	Machinery, Kiabakari	—	—	44,000	44,000
6362	Building Brigade	800,000	—	—	800,000
	Total—Prisons ...	3,300,000	3,000,000	4,500,000	10,800,000

SECTION III—IMMIGRATION

In order to make Immigration Services more effective, it is intended to establish Regional offices which will take over some of the functions at present done at Headquarters. Total programme is estimated to cost Shs. 1,800,000/- most of which will be spent on constructing office accommodation and staff quarters where Government Housing is not available. It is proposed to purchase vehicles, and Radio Equipment worth Shs. 180,000/- and Shs. 22,170/- respectively.

The programme of the Division is phased as follows:—

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
6401	Regional Office, Arusha ...	81,270	—	—	81,270
6407	Office Building, Seronera ...	—	—	45,000	45,000
6403	Staff Quarters, Seronera ...	36,990	—	—	36,990
6404	Staff Quarters, Namanga, I ...	—	26,500	—	26,500
6405	Staff Quarters, Namanga, II ...	—	—	53,000	53,000
6406	Radio Equipment	—	—	22,170	22,170
6407	Regional Office, Mwanza ...	—	—	81,270	81,270
6408	Purchase of Vehicles	—	90,000	90,000	180,000
6409	Regional Office, Kigoma ...	—	—	81,270	81,270
6410	Regional Office, Tanga ...	—	81,270	—	81,270
6411	Holoholo Office, Holoholo ...	39,750	—	—	39,750
6412	Staff Quarters, Holoholo, I ...	39,990	—	79,500	119,490
6413	Staff Quarters, Holoholo, II ...	53,000	—	—	53,000
6414	Regional Office, Mbeya ...	—	81,270	—	81,270
6415	Staff Quarters, Tunduma ...	26,500	26,500	116,490	169,490
6416	Office, Kasesya	—	39,750	—	39,750
6417	Staff Quarters, Kasesya ...	—	53,000	26,500	79,500
6418	Office, Itungi	—	39,750	39,750	39,750
6419	Staff Quarters, Itungi	—	—	53,000	53,000
6420	Office, Taveta	39,750	—	—	39,750
6421	Staff Quarters, Taveta	79,500	—	89,990	169,490
6422	Office, Matukula	—	—	39,750	39,750
6423	Staff Quarters, Matukula ...	—	—	106,000	106,000
6424	Regional Office, Dodoma ...	—	—	81,270	81,270
	Total—Immigration ...	396,750	398,290	1,004,960	1,800,000
	Total—Ministry ...	9,086,750	9,198,290	52,714,960	71,000,000

(xiii) MINISTRY OF HEALTH AND SOCIAL WELFARE

The investment programme of the Ministry of Health and Social Welfare in the Five-Year Plan amounts to Shs. 98·8 million and falls into two broad categories:

I—Health Services.

II—Probation and Welfare Services.

SECTION I—PUBLIC HEALTH PROGRAMMES

To implement the strategy laid down in the chapter on Health in Volume I, the following investment programme is envisaged .

5401 *Rural Health Centres.*

It is intended to establish 80 rural health centres which besides providing supervision of dispensaries in their respective areas will also organize preventive campaigns, such as nutrition education, environmental sanitation, maternal and child health services and immunization, etc.

The cost of establishing each rural health centre is estimated at Shs. 340,000/-. During the first two years of the Plan, 20 rural health centres (10 each year) will be established at Bagamoyo, Iringa, Usangi, Sumbawanga, Ulanga, Liwale, Monduli, Mbeya, Manyoni, Ngara, Kondoa, Njombe, Kigoma, Kasulu, Tarime, Rungwe, Iramba, Tabora, Lushoto and Karagwe. Efforts in establishing rural health centres will be stepped up to provide 15 during the third year, 20 during the fourth year and 25 during the last year of the Plan.

5402 *Nutrition Services.*

This project entails the intensification of nutrition services to cover the whole country. At present nutrition services are provided in six regions only by mobile district teams operating under the direction of a Regional Nutrition Officer, or Assistant Medical Officer of Health, supported by the Central Nutrition Unit in Dar es Salaam. The project is estimated to cost Shs. 1·9 million.

5403 *Environmental Sanitation Unit.*

A central environmental sanitation unit will be established which would encourage demonstration projects directly related to improving public health. This project aims at improving environmental sanitation throughout the country—safe water supplies, excreter and waste disposal, food hygiene, housing and control of certain communicable diseases. It is to cost Shs. 411,000/-.

5404 *Communicable disease control unit.*

It is proposed to establish a central unit for communicable disease control, pooling the resources and co-ordinating the activities of various specific communicable disease programmes—small pox, leprosy, tuberculosis, etc. These services are at present provided by Central Government, local authorities, voluntary and international agencies. These will continue but with increased professional administrative guidance and support from the proposed unit. The unit will be responsible to promote all forms of immunization and to hold the necessary stocks of vaccine. The unit is estimated to cost Shs. 1·36 million.

5405 *Health Education Unit.*

It is intended to extend the activities of the existing Health Education Unit in the training of health staff of health centres and mobile and other centres, teachers and community development staff, supplying equipment and conducting special activities such as radio programmes. The total cost is estimated at Shs. 51,000/-.

5406 *Occupational health.*

The Ministry of Health is responsible for providing inspectory supervision and advisory services for the medical facilities provided by industrial employers. It is also responsible for identifying occupational diseases, industrial poisons, etc. and prescribing for their treatment. It is now proposed to make a beginning in providing these services adequately. An occupational Health unit will therefore be established during the Second Plan period. The unit is expected to provide health services to industry primarily in Dar es Salaam and will carry out research into all occupational aspects of health. It wil lalso provide a mobile dispensary to serve Dar es Salaam and the surrounding areas. A sum of Shs. 100,000/- has been allocated to this project.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5401	New Rural Health Centres ...	3,400,000	3,400,000	20,400,000	27,200,000
5402	Nutrition Services (all over the country)	260,000	288,000	1,358,500	1,906,500
5403	Environmental Sanitation ...	151,000	—	260,000	411,000
5404	National Public Health Inst. Dar es Salaam	—	21,000	1,336,000	1,357,000
5405	Health Education, (National) Mobile	31,000	10,000	10,000	51,000
5406	Occupational Health	2,000	60,000	38,000	100,000
	Total—Public Health ...	3,844,000	3,779,000	23,402,500	31,025,500

SECTION II—MEDICAL TRAINING

The training programmes during the Second Plan will aim at ensuring adequate supply of trained medical and para-medical staff at all levels and to improve as rapidly as possible the efficiency and grade of personnel working in various spheres.

Training facilities for some cadres are adequate, but expansion is planned in the training of post-graduate Medical Specialists, Psychiatrists, "Grade B" Nurses Laboratory Technicians, Health Auxiliaries and especially Medical Assistants and Rural Medical Aids as demand for their services is likely to increase considerably with the establishment of Ujamaa Villages.

Training facilities will be expanded by undertaking the following projects: —

5410 *Re-Establishment of "B" Nursing School, Tanga.*

In order to utilize the existing training facilities for "B" Nurses to their full capacity, and in order to provide promotional opportunities for serving Nursing Assistants (formerly Nursing Orderlies), the Tanga Nursing School will be re-opened to enable deserving Nursing Assistants to pursue formal training for 3 years and qualify as Nurses in the "B" register. The cost is estimated at Shs. 400,000/-.

5411 *Training of Psychiatric Nurses, Dodoma.*

It is intended to train about 30 Nurses during the Second Five-Years Plan as Nurses for psychiatrics. The three-year course will lead to registrable qualification in mental nursing. This training will be done at Mirembe, Dodoma. It is estimated to cost Shs. 101,000/-.

5412 *Medical Assistants' Schools.*

This project is for the expansion of training facilities for Medical Assistants required in out-patient clinics and Rural Health Centres. It is proposed to use to full capacity the training facilities available at Bumbuli (Lushoto) and Tanga Training Centre, and to set up a Training Centre at Mwanza which will turn out 40 Assistants every year. Sengerema Hospital will also train Rural Medical Aids. Total cost is estimated at Shs. 160,000/-.

5407 *Hostel for Inspectors/Auxiliaries, Dar es Salaam.*

5408 *Teaching Block, Nurses/Inspectors, Dar es Salaam.*

As present hostel accommodation at the Medical Training Centre, Muhimbili, Nursing School, Health Inspectors' School and classrooms for Auxiliaries are to be used for the expansion of the Faculty of Medicine, a new hostel for Inspectors/Auxiliaries and a Teaching Block for Inspectors/Nurses have been planned for 1969/70. The hostel is estimated to cost Shs. 500,000/- and the teaching block Shs. 597,000/-.

5409 *Extension to Hostel for Interns.*

The Interns' Hostel will be extended to accommodate 40 more interns—at a cost of Shs. 600.000/-.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5407	Hostel for Inspectors/ Auxiliaries (Dar es Salaam) ...	500,000	—	—	500,000
5408	Teaching Block, Nurses/Inspectors, Dar es Salaam ...	597,000	—	—	597,000
5409	Extension to Intern. Hostel 2 phases	500,000	100,000	—	600,000
5410	Re-establishment of "B" Nurse School, Tanga	—	—	400,000	400,000
5411	Psychiatric Nurse School, Dodoma	—	—	101,000	101,000
5412	Medical Assistants' Schools, Tanga, Bumbuli (Lushoto) Machame (Moshi) and Mwanza	80,000	80,000	80,000	160,000
	Total—Training ...	1,677,000	180,000	501,000	2,358,000

SECTION III—HOSPITAL SERVICES

In the Second Five-Year Plan, efforts will be made to improve Government hospital services; improvement in standards and replacement of expensive equipment being two important aspects. At the same time, some attention will be directed towards expansion of hospital services.

The programme is summarised below and will cost Shs. 56·0 million.

5413 *Psychiatry.*

The provision of regional psychiatric wards is to be started during the Plan at 6 places. This will relieve the pressure on Mirembe Mental Hospital and serve as Mental Health Centres with beds for patient needing in-patient care, and will have facilities for out-patient treatment. The programme is estimated to cost Shs. 2·4 million.

5414–55 *Hospitals and Extensions.*

During the Second Five-Year Plan District Hospitals will be built in districts in which there are only meagre or no hospital facilities and small District Hospitals will be expanded to a minimum of 100 to 120 beds. Additional hospital beds are planned for many District Hospitals.

New Regional Hospitals will be built at Musoma and Dodoma and 2 Consultant's Hospitals for Iringa and Mtwara have been planned for the later part of the Plan. Both Dar es Salaam and Tanga hospitals have assumed teaching functions and therefore programmes of expansion and modernization of these will be undertaken. The programme is phased in the following Table and is estimated to cost Shs. 37·8 million.

5456–5463 *Urban—Out-Patient Services.*

Will be provided by the establishment of outpatient centres which are intended to function as "screens" for the hospitals which they serve. Six new centres are planned for the five year period and the ones at Muhimbili, Mbeya and Kyela Hospitals will be extended to cater for the high number of out-patients. These will carry on a variety of functions including special child health clinics. The cost is estimated at Shs. 3·9 million.

5464–5488–5301 *Miscellaneous Projects for the Improvement of Existing Facilities.*

Provision has been made for various extensions, improvement and modernization of building facilities and replacement of equipment etc. and for improving the standard of existing facilities. The improvement programme is estimated to cost Shs. 11·9 million.

5487 *Flying Doctor Service.*

A project for the development of Flying Doctor Services for providing emergency services and also to provide services to areas which are inaccessible during rainy periods, has been included.

The projects for each category above, are phased below: —

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5413	Psychiatric Wards, Arusha, Iringa, Kigoma Ligula, Songea and Bukoba	—	205,000	2,225,000	2,430,000

HOSPITALS AND EXTENSIONS

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5414	*Arusha* 2 × 26 bed wards (inc. maternity wards	—	299,000	299,000	598,000
5415	*Coast* 350 bed Obstetric Block Muhimbili, D'Salaam ...	2,854,000	2,926,000	—	5,780,000
5416	*Iringa* 52 additional beds at Iringa	—	—	598,000	598,000
5417	*Iringa* 80 beds District Hospital, Mufindi	—	690,000	1,150,000	1,840,000
5418	*Kigoma* 65 additional beds at Kigoma	299,000	—	448,500	747,500
5419	52 additional beds at Kibondo...	—	299,000	299,000	598,000
5420	*Mara* New Musoma Regional Hospital, 1st Phase 120 beds...	—	—	3,000,000	3,000,000
5421	1 × 8 beds Isolation Ward, Mbeya...	—	92,000	—	92,000
5422	39 beds at Kyela (Mbeya Region)	—	149,500	299,000	448,500
5423	*Morogoro* 52 additional beds, Morogoro	—	299,000	299,000	598,000
5424	39 additional beds, Kilosa ...	—	—	448,500	448,500
5425	*Mtwara* 26 additional beds at Ligula, Mtwara	—	299,000	—	299,000
5426	39 additional beds at Kilwa ...	—	149,500	299,000	448,500
5427	*Ruvuma* 2 × 26 bed wards Songea	—	299,000	299,000	598,000
5428	1 × 13 bed ward, Singida ...	—	—	149,500	149,500
5429	A new 120 bed Hospital, 1st Phase at Shinyanga	—	—	3,000,000	3,000'000
5430	*Tabora* 1 × 13 bed ward, Mpanda	—	149,500	—	149,500
5431	*Tanga* 1 × 200 bed ward Bombo, Tanga	—	1,040,000	1,040,000	2,080,000
5432	*Arusha* 1 × 26 beds, Mbulu ...	—	—	299,000	299,000
5433	*Coast* 39 beds at Utete	—	—	448,500	448,500
5434	190 beds, Dodoma Hospital (replacement)	—	—	3,750,000	3,750,000
5435	*Coast* 52 beds at Bagamoyo (replacement)	—	—	598,000	598,000
5436	26 beds at Mpwapwa-Dodoma Region	—	—	299,000	299,000
5437	26 beds at Kondoa Region ...	—	—	299,000	299,000
5438	*Iringa* 20 additional beds at Njombe	—	—	230,000	230,000
5439	*Kigoma* 26 additional beds at Kasulu	—	—	299,000	299,000
5440	*Kilimanjaro* 26 beds (additional) at Same	—	—	299,000	299,000
5441	*Mbeya* 39 additional beds, Mbeya	—	—	448,500	448,500
5442	*Mara* 13 beds at Tarime ...	—	—	149,500	149,500
5443	*Mbeya* 39 additional beds at Sumbawanga	—	—	448,500	448,500
5444	*Mbeya*, Mbozi District Hospital (100 beds)	—	—	2,300,000	2,300,000
5445	1 × 26 bed ward (Maternity) at Mahenge (Morogoro Region)	—	—	299,000	299,000
5446	13 beds at Lindi (Mtwara) ...	—	—	149,500	149,500
5447	21 beds at Nachingwea (Replacement)	—	—	241,500	241,500
5448	Consultant Hospital at Mtwara (1st Phase)	—	—	2,000,000	2,000,000

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5449	13 beds at Ukerewe (Mwanza)...	—	—	149,000	149,000
5450	*Mwanza*, 39 beds at Geita ... (inc. Replacement of 13 beds)	—	—	448,500	448,500
5451	*Ruvuma*, Replacement of 34 beds at Tunduru	—	—	391,000	391,000
5452	*Shinyanga*, 26 beds at Kahama...	—	—	299,000	299,000
5453	26 additional beds at Handeni, (Tanga)	—	—	299,000	299,000
5454	*Tanga*, 13 additional beds at Lushoto	—	—	149,000	149,000
5455	Consultant Hospital, Iringa ...	—	—	2,000,000	2,000,000
	Total ...	3,153,000	6,691,500	27,923,000	37,767,500

OUT-PATIENT SERVICES

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5456	1 out-patient Centre, Arusha ...	675,000	—	—	675,000
5457	2 out-patient Centres, Temeke, Kinondoni	1,150,000	—	—	1,150,000
5458	1 out-patient Centre, Morogoro	—	—	675,000	675,000
5459	1 out-patient Block, Kahama ...	—	300,000	375,000	675,000
5460	Extension to out-patient and Services Department, Muhimbili	—	—	304,590	304,590
5461	Extension to out-patient Block, Mbeya...	—	—	88,000	88,000
5462	Extension to out-patient Block, Kyela	—	—	50,000	50,000
5463	A new out-patient Block, Bukoba	—	—	300,000	300,000
	Total ...	1,825,000	300,000	1,792,590	3,917,590

MISCELLANEOUS AND IMPROVEMENT PROJECTS

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5464	Equipment for 4th Operating theatre, Muhimbili	—	—	20,000	20,000
5465	Generator for X-ray equipment, Mafia	15,000	—	—	15,000
5466	Installation of W.C. Sanitation, Songea	20,000	—	—	20,000
5467	Extension of Adm. Block, Singida	60,000	—	—	60,000
5468	Pharmacy/Store Block, Bombo	—	—	675,000	675,000
5469	Theatre with X-ray, Bombo-Tanga Region	285,000	—	—	285,000
5470	Extension-Kitchen and Laundry, Bombo	—	120,000	120,000	240,000
5471	Kitchen and Laundry Block, Bukoba	—	180,000	—	180,000
5472	Improvements to existing hospitals (All Government Hospital wards)	500,000	500,000	2,250,000	3,250,000
5473	Replacement of X-ray Plant (Gen.)	760,000	—	—	760,000
5474	Modernization of Kitchen Equipment and Laundry Units in Hospital (Gen.) ...	104,000	104,000	312,000	520,000
5301	Institutional Housing for Staff (General)	1,000,000	1,000,000	2,000,000	4,000,000
5475	Kibiti Health Centre-Phase II (Coast Region)	—	—	120,000	120,000
5476	Operating Theatre, Same (Kilimanjaro Region) ...	—	160,000	—	160,000
5477	A new X-ray, Kyela (Mbeya Region)	85,000	—	—	85,000
5478	Morogoro I X-ray Unit, Mahenge	—	—	85,000	85,000
5479	Morogoro—Installation of W.C. and Sanitation, Mahenge ...	—	—	25,000	25,000
5480	Sanitation, Kitchen, Laundry, Morogoro	—	—	180,000	180,000
5481	Health Office, Ifakara (Morogoro Region)	—	—	65,000	65,000
5482	I new X-ray Unit, Tunduru (Ruvuma Region)	—	—	45,000	45,000
5483	A new operating Theatre, Songea, (Ruvuma Region) ...	—	—	180,000	180,000
5484	Kitchen/Laundry Block, Songea	—	—	180,000	180,000
5485	I Adm/OPD Block, Songea ...	—	—	300,000	300,000
5486	I X-ray Room, Singida	—	—	30,000	30,000
5487	Flying Doctor Services (to cover Rufiji/Utete, Mafia and Kilwa Areas)	—	—	50,000	50,000
5488	A bedded dispensary—Mto-wa-Mbu	—	—	391,000	391,000
	Total—Misc. Projects ...	2,829,000	2,064,000	7,028,000	11,921,000
	Total—Hospital Services ...	7,807,000	9,260,500	38,968,590	56,036,090

SECTION IV—ANCILLARY AND SPECIAL SERVICES

The services considered under the programme include Pharmacy and Supplies, Dental Services, Chemical Laboratory, Physiotherapy, Occupational Therapy, Radiography and Rehabilitation and expansion of Medical Stores, Dar es Salaam. The following projects are planned for the Second Five-Year Plan.

5491 *Chemical Laboratory.*

In order to facilitate the work of the Chemical Laboratory further accommodation facilities and modern equipment will be provided.

5494 *Dental Services.*

During the Five-Year Plan new dental units will be established at Kigoma, Songea and Singida.

5501 *Rehabilitation Settlement Centres for Psychiatric Persons.*

In order to cope with the increasing number of chronic phychic cases, the two existing instiutions for such persons at Irente and Lutindi will be expanded. It is also planned to provide 6 more Rehabilitation Settlement villages for the rehabilitation of chronic mental cases.

5493 *Pathological Block, Muhimbili.*

The construction of the new Pathology Block, Muhimbili has already started. Shs. 1,680,000/- will be Tanzanian contribution to the Pathology Block.

5492 *Pathological Laboratories.*

It is intended to establish essential "B" Laboratories at Regional Hospitals at Iringa, Kigoma, Mbeya, Songea and Singida. The estimated cost is about Shs. 196,000/-.

ANCILLARY SERVICES

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5489	Warehouses, Medical Stores, Dar es Salaam	300,000	—	300,000	600,000
5490	Extension of racks and truck, Dar es Salaam	62,000	—	—	62,000
1201	Vaccine plant building ...	500,000	—	—	500,000
5491	Chemical Laboratory (1st phase), Dar es Salaam	—	—	280,000	280,000
5492	Pathological Laboratories at Iringa, Kigoma, Mbeya, Songea and Singida hospitals	50,000	41,000	105,000	196,000
5493	Pathological Block, Muhimbili (Government contribution) ...	340,000	540,000	800,000	1,680,000
5494	Dental units, Kigoma, Songea and Singida	39,000	39,000	39,000	117,000
5501	Three Rehabilitation/Settlement villages for Psychiatric persons	—	—	900,000	900,000
	Total—Ancillary and Special Services	1,291,000	620,000	2,424,000	4,335,000

SECTION V—PROBATION WELFARE DIVISION

During the Second Five-Year Plan it is intended to extend social welfare services in the country with particular emphasis on providing for the destitutes, the physically handicapped and deliquents. Wherever possible, it is also planned to give them appropriate basic training in trade or agriculture so as to help them become self-supporting. Provision is also made for children in need of care. Voluntary welfare agencies will be encouraged to play an active role in the organization of welfare services and to co-ordinate such welfare activities throughout Tanzania. The following projects are planned.

5502 *Dar es Salaam Rehabilitation Centre.*

This is a two phase project intended to provide accommodation for 120 destitutes; besides providing accommodation to the physically handicapped and homeless aged, it will provide vocational training.

The project is jointly financed with the City Council of Dar es Salaam—Phase 1, a residential centre at Yombo is likely to be completed by the end of 1968/69. Phase 2 of the project, for training is phased for the Second Five-Year Plan.

5503 *Destitute Centres.*

Three residential centres, intended to provide care to the homeless aged and physically handicapped destitutes, will be constructed at Morogoro, Dodoma and Mwanza. Each centre will accommodate 60 people and is estimated to cost Shs. 396,000/-.

5504 *Remand Homes.*

Four remand homes intended to provide security homes for juvenile offenders placed on remand by the courts will be built at Mwanza, Arusha, Bukoba and Lindi. Each remand home will accommodate 15 boys and 8 girls, and will provide initial social rehabilitation to juvenile deliquents. Each is estimated to cost Shs. 168,000/-.

5505 *Water Supply—Malindi Approved School.*

The project is intended to extend the Dar es Salaam Water Supply from Wazo Hill to the Malindi Approved School, a distance of 6 miles.

5506 *Rural Probation Villages.*

Nine probation villages, each costing Shs. 120,000/- will be set up in "Ujamaa Villages" in Bukoba, Tabora, Kilimanjaro, Singida, Mtwara and Mbeya areas. These are intended to accommodate deliquents on probation, who will be under close supervision and guidance of Probation staff, so that they can be finally assimilated in the community.

5507 *National Child Care Centres.*

A sum of 1,070,000/-, a UNICEF grant, will be spent for establishing 20 child care centres. The estimated expenditure includes buildings cost, equipment, training funds and provision for a Child Care and Development Specialist. The establishment of Child Care Centres is considered important as an increasing number of women are taking part in self-help projects and engage in part-time and full-time employment.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5502	Rehabilitation Centre, Dar es Salaam	—	—	700,000	700,000
5503	Destitute Centres	396,000	396,000	396,000	1,188,000
5504	Remand Homes	168,000	336,000	168,000	672,000
5505	Approved School (Malindi) ...	360,000	—	—	360,000
5506	Rural Probation Villages ...	—	360,000	720,000	1,080,000
5507	National Child Care Centres ...	1,070,000	—	—	1,070,000
	Total—Probation and Welfare Division ...	1,994,000	1,092,000	1,984,000	5,070,000
	Total—Ministry ...	16,613,000	14,931,500	67,280,090	98,824,590

(xiv) MINISTRY OF INFORMATION AND TOURISM

The investment programme of the Ministry of Information and Tourism in the Second Five-Year Plan amounts to Shs. 16,750,000/-. This doesn't include programmes in National Parks which are in the Parastatal's programme and construction of Radio Tanzania Studios and offices which is under the responsibility of Comworks.

SECTION I—INFORMATION AND BROADCASTING

5601 *Listening Points.*

Radio is the major mass media for effective communication with the people. It is planned to set up listening points so as to reach a larger number of people who can not afford to buy their own radio sets.

Negotiations have also started to produce low cost radio sets which more people can afford to buy. The Ministry will encourage the production and distribution of low cost sets. A sum of Shs. 1·5 million has been allocated for this project.

4201 *Satellite Stations.*

Present Radio Signals from Dar es Salaam do not reach all regions satisfactorily, especially Tabora, Mbeya and Arusha. As such, people living in these areas can listen better to neighbouring foreign Radio Stations than Radio Tanzania. Transmitting stations in these regions are aimed at improving this unsatisfactory situation. The project includes transmitter buildings, transmitter test equipment and staff houses. The project is estimated to cost Shs. 4·2 million.

4202 *Replacement of Transmitters.*

Two old transmitters at Radio Tanzania require heavy repairs from time to time. They have almost become unserviceable. Replacement of these two old short-wave transmitters will cost Shs. 1,800,000/-.

4203 *Disc-Cutting Machine.*

Due to high humidity, record tapes deteriorate very fact. As such, adequate care of important recorded tapes becomes a problem. Many recorded programmes have to be re-recorded after a period. It is therefore intended to purchase a disc-cutting machine for non-commercial gramophone record production. Disc-records which are easy to preserve and occupy less space could then replace recorded tapes. The machine will cost Shs. 500,000/-.

4204 *Monitoring Stations.*

It is intended to supplement the present foreign news sources (Rueter, Tass, Ceteka). With new radio receiving equipment for monitorring other Radio Stations, it will become possible to receive news in time directly from where they occur. The total cost of the project is estimated at Shs. 300,000/-.

1201 *Film Processing Plant.*

At present all films are processed overseas at a very high cost. It is considered economical to have a film processing plant to process all cinema films of Ministries and Parastatals, etc. in Tanzania. The unit will also accept work on commercial basis from other neighbouring countries where such facilities do not exist. Total cost of the project is estimated at Shs. 4 million.

4205 *Mobile Recording Van.*

It is intended to buy equipment for outside recording/broadcasting to make Radio Tanzania more responsive in covering nationally important events. A sum of Sh. 450,000/- has been allocated.

Radio Tanzania Offices and Studios.

With increased emphasis on the production of local programmes, more office and studio space is required. A new building is, therefore, planned at an estimated cost of Shs. 1,160,000/- and is included in Comworks' programme. (Code 4206).

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
5601	Listening Points...	50,000	100,000	1,350,000	1,500,000
4201	Satellite Stations	1,400,000	1,400,000	1,400,000	4,200,000
4202	Replacement of Transmitters ...	—	1,000,000	800,000	1,800,000
4203	Dis-Cutting Machine	—	—	500,000	500,000
4204	Monitoring Stations	—	—	300,000	300,000
1201	Film Processing Plant	—	1,000,000	3,000,000	4,000,000
4205	Mobile Record Van	—	—	450,000	450,000
	Total—Information and Broadcasting ...	1,450,000	3,500,000	7,800,000	12,750,000

SECTION II—TOURISM

1601 *Tourist Roads and other Infrastructure.*

The project involves construction of access roads, roads in the Game Reserves and other infrastructure like landing grounds and water supplies, etc. A sum of Shs. 4 million has been allocated for this purpose.

Code No.	Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
1601	Tourist Roads and Other Information...	600,000	250,000	3,150,000	4,000,000
	Total—Tourism ...	600,000	250,000	3,150,000	4,000,000
	Total—Ministry of Information and Tourism ...	2,050,000	3,750,000	10,950,000	16,750,000

PARASTATAL PROGRAMME

SECTION I—TANZANIA TOURIST CORPORATION (T.T.C.)

T.T.C. has been established to take over all tourist activities now undertaken by the N.D.C. and to plan further an expanded programme of tourist promotion. With considerable tourist potential a rapid build up of tourist facilities is being given high priority. T.T.C. will also continue the existing functions of the Tanzania National Tourist Board, in particular promotional activities of a general nature.

T.T.C. plans to invest over Shs. 203 million during the Plan period. Some of the projects have already been carefully worked out, while others require detailed investigations. Present plans include the following projects:—

Project Designation	Total Estimated Expenditure 1969/70–1973/74
New Africa Hotel Development	27,750,000
Serengeti Safari Lodge ...	10,454,000
Mwanza Hotel	5,000,000
Hilton Hotel	35,000,000
Dar Beach Hotel II	8,000,000
Kilwa and Selous Lodges ...	1,000,000
Lake Manyara No. 2	7,000,000
Meru Lodge	6,000,000
Tanga Hotel	2,000,000
Summit Hotel, Arusha	30,000,000
Zanzibar Hotel	8,000,000
Mtwara Beach Hotel	3,000,000
Bahari Beach Hotel	6,200,000
Club Mediterranée	14,000,000
Serengeti Safari Lodge ...	24,600,000
National Tours	14,000,000
Total ...	203,004,000

SECTION II—NATIONAL PARKS

Wildlife is one of Tanzania's great natural resources and is a major tourist attraction. National Parks' aim is to preserve it and make it accessible to visitors.

During the Second Plan, National Parks intend to make considerable improvements in the existing parks and establish new parks in the Kilimanjaro and in the south.

The investment programme of National Parks is estimated to cost Shs. 29·6 million, and is phased as follows:—

Project Designation	Estimated Expenditure 1969/70	Estimated Expenditure 1970/71	Estimated Expenditure 1971/72–1973/74	Total Estimated Expenditure 1969/70–1973/74
Development of existing Parks...	4,450,000	6,500,000	10,310,000	21,260,000
Kilimanjaro Park	—	—	4,380,000	4,380,000
Southern Parks	—	—	4,000,000	4,000,000
Total ...	4,450,000	6,500,000	18,690,000	29,640,000

GLOSSARY

Ministry	*Telegraphic Address*
President's Office	CABINET
Central Establishment Division	ESTABS
Foreign Affairs	FOREIGN
Regional Administration and Rural Development	MAENDELEO
Agriculture, Food and Co-operatives	KILIMO
Finance	TREASURY
Second Vice-President's Office	MAKAMU
Economic Affairs and Development Planning	DEVPLAN
Commerce and Industries	MINCOM
Communications, Transport and Labour	COMWORKS
National Education	EDUCATION
Lands, Housing and Urban Development	LANDSURVEY
Home Affairs	HOME
Information and Tourism	MAELEZO
Health and Social Welfare	HEALTH

Parastatal	*Abbreviation*
Tanzania Electrical Supply Co. Ltd.	TANESCO
National Development Corporation	N.D.C.
National Small Industries Corporation	N.S.I.C.
State Trading Corporation	S.T.C.
Tanzania Tourist Corporation	T.T.C.
National Parks	PARKS
National Housing Corporation	N.H.C.
Mwananchi Engineering and Construction Co.	M.E.C.C.O.
National Agriculture and Food Corporation	N.A.F.C.O.
Tea Authority	
Tanzania Sisal Corporation	T.S.C.
The National Milling Corporation	N.M.C.
Lint and Seed Marketing Board	L.S.M.B.
Tanzania Tobacco Board	T.T.B.
National Agricultural Products Board	N.A.P.B.
National Dairy Board	N.D.B.
National Development Credit Agency	N.D.C.A.
National Co-operative Bank	N.C.B.
National Sugar Board	N.S.B.
Tanzania Pyrethrum Board	T.P.B.
Tanzania Sisal Marketing Board	T.S.M.B.
Tanzania Coffee Board	T.C.B.
National Co-operative and Development Bank	N.C.D.B.
National Bank of Commerce	N.B.C.
National Insurance Corporation	N.I.C.

Parastatal	*Abbreviation*
EAST AFRICAN COMMUNITY	E.A.C.
EAST AFRICAN AIRWAYS CORPORATION	E.A.A.
EAST AFRICAN RAILWAYS CORPORATION	E.A.R.
EAST AFRICAN HARBOURS CORPORATION	E.A.H.
EAST AFRICAN POSTS & TELECOMMUNICATIONS	E.A.P. & T.